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STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

LEASE / UNIT* PLAN OF OPERATIONS APPLICATION

Applicant: Brooks Range Petroleum Corporation Date: 10/30/2012

Contact Person: Mark C. Wiggin Telephone #: (907) 865-5808 Fax # (907) 339-9961

Mailing Address: 510 L Street, Ste 601 Anchorage, AK 99501 E-mail Address: mwiggin@brpcak.com

Is this activity within a Unit? Yes Unit name: Southern Miluveach Operator: BRPC

Is any part of the proposed project or activity discussed in the approved Unit Plan of Exploration or Development filed with the Division of Oil and Gas? ☒ Yes ☐ No

If no, attach a detailed explanation.

The Applicant is: ☒ Unit Operator ☒ Lessee* ☐ Tract Operator ☐ Other*: _____

Project Description: Mustang Oil Field Development Project will involve the development of a gravel mine and small oil production facility within the SMU.

Project Location / Facility Name: Mustang Oil Field and Mine Site are located in SMU

ADL # (*mandatory*): 390680 Oil and Gas Bond #: LPM8842180

Plan of Operations require a $250.00 permit fee; payable to the State of Alaska, Department of Revenue; and *should* accompany this application.

1. Plan of Operations: Attached

   (Attach extra sheets if necessary, include applicable diagrams and drawings)

2. Surface Property Owner: Alaska Department of Natural Resources

3. Legal Description: Section 1,2/5,6, Township 10N, Range 07/08E, Meridian Umiat
   Section 35, 36/31-33, Township 11N, Range 07/08 E, Meridian Umiat
   Decimal Degrees, NAD 83 Latitude ____._____ Longitude ____._____
   (Include all necessary maps and use http://transition.fcc.gov/mb/audio/bickel/DDDMMSS-decimal.html)

4. Site Access: Ice Roads

5. Proposed Start-up Date: 01/01/2013 6. Expected Completion Date: 12/31/2014

7. Project Material: Gravel 8. Material Source: New (Mustang Mine)

   a) Amount: (pad) 276,750 cy (road) 233,699 cy (other) 218,000 cy

   b) Acreage Covered: (pad) 19.3 (road) 33.2 (other) 5.0

9. Snow Removal Plan: See Plan of Operations

*** Unit Plan of Operations approvals are not considered complete until the consent of the Unit Operator has been obtained by the applicant.**

10. Will Any Off-road (tundra or ice) Travel be Required? Yes

a) Period of Off-road Travel: 1/1/2013-4/31/2013

b) Equipment to be Utilized: Rolligons, tuckers, and other equipment used during exploration

11. Will a Temporary Water Use Permit be Required? Yes, Intend to use existing permitted water sources

a) Purpose: Ice road and ice pad construction

b) Sources: permitted water sources (See Plan of Operations, Section)

c) Access: Ice Roads d) Max. Anticipated Withdrawal: *See below

12. Will Fuel or Any Other Hazardous Substances be Stored on Site? Yes

a) Type: Diesel fuel, crude oil, methanol, ethylene glycol, and lube oils

b) Volume: Multiple storage vessels - See Plan of Operations

c) Handling Technique: Storage vessels will be within lined and diked secondary containment.

d) Access: Restricted. Only authorized on-site personnel will be allowed to access stored fuel.

e) Duration of Storage: Drilling - 24 months. All other storage infrastructure will be till end of field life.

13. If a Pipeline is Being Constructed, will the line be a:

☐ Common Carrier Pipeline ☒ Field Gathering Line ☒ Other: Sales Oil, Water

a) Location / Route: See Plan of Operations Figure 1

b) Number, Diameter and Length: (2) One-1,000', 6" sales crude line, One-1,000', 6" water line

c) Type and Use: Crude Oil transportation, Water supply for waterflood

d) Construction Access: Ice roads

14. Plan for Rehabilitation: ☐ Upon Abandonment ☒ Specific: *see attached plan*

15. Is Any Part of this Application Confidential? No

16. How will Solid Waste be Disposed of? See Plant of Operations Section 10

17. What Infrastructure will be Used to Support the Project? Existing spine road, Alpine Transportation Company Crude Pipeline, CPF2 Seawater Pipeline See Plan of Operations Section 2 for further details.

18. Additional Comments: *Maximum water withdrawal will occur in calendar year 2013, when a total of 12.3 Million Gallons will be withdrawn to support gravel extraction and the construction of gravel roads, the gravel pad, and infrastructure for the development.

The undersigned hereby requests that each page of this application marked confidential be held confidential under AS 38.05.035(a)(8).

Jeanette M Case for MARK C. WIGGIN | Engineering and Development Manager | 10/30/2012

Signature | Title | Date

Please fill out the form, print it, and sign it.

LESSEE/SURFACE-OWNER INTERACTION

Statutes and regulation are explicit about how surface and subsurface owners and lessees shall interact; the subsurface estate is controlling. We have paraphrased here the relevant portions of AS 38.05.125 and AS 38.05.130 (a photocopy of the full text may be obtained by calling 269-8775):

> ***AS 38.05.125 Reservation.*** *(a) Each contract for the sale, lease or grant of state land, and each deed . . . is subject to the following reservation:*
>
> *". . . Alaska, hereby expressly saves . . . and reserves out of the grant . . . forever, all oils, gases, coal, ores, minerals, fissionable materials, geothermal resources, and fossils of every . . . kind . . . which may be in or upon said land . . . and the right to explore the same . . ., and it expressly saves and reserves . . . the right to enter . . . upon said land, . . . at any and all times for the purpose of opening, developing, drilling, and working mines or wells . . . and taking out and removing . . . oils [and] gases . . . and to that end it further expressly reserves . . . the right to erect, construct, maintain, and use all such buildings, machinery, roads, powerlines, and railroads, sink such shafts, drill such wells, remove such soil, and to remain on said land . . . for the foregoing purposes and to occupy as much of said land as may be necessary or convenient . . . expressly reserving to itself, its lessees, successors, and assigns, . . . all rights and powers in, to, and over said land . . . reasonably necessary or convenient to render beneficial and efficient the complete enjoyment of the property and rights hereby . . . reserved."*

That language is part of each deed awarded when the state transfers the surface estate; it retains the subsurface. The reservation includes the right to use the surface to develop the subsurface as well as to use existing facilities such as roads for the benefit of the entire state. Protection from damages is afforded surface owners at AS 38.05.130:

> ***AS 38.05.130 Damages and posting of bond.*** *Rights may not be exercised by the state, its lessees, successors or assigns under the reservation . . . [AS 38.05.125] . . . until the state, its lessees, successors, or assigns make provisions to pay the owners of the land full payment for all damages sustained . . . by reason of entering upon the land. If the owner refuses . . . to settle the damages, the state, its lessees, successors, assigns . . . may enter upon the land in the exercise of the reserved rights after posting a surety bond determined by the director, after notice and an opportunity to be heard, to be sufficient as to form, amount, and security to secure . . . payments for damages, and may institute legal proceedings . . . to determine to damages which the owner may suffer.*

In addition, there are general stipulations in the regulations at 11 AAC 96.140 that address the conduct of operations. Most relevant here is (10):

> *No person may engage in mineral exploratory activity on land, the surface of which has been granted or leased by the State of Alaska . . . until good-faith attempts have been made to agree with the surface owner . . . on settlement for damages . . . . If agreement cannot be reached, . . . operation may be commenced . . . only with specific approval of the director, and after making adequate provisions for full payment of any damages . . ..*

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Brooks Range Petroleum

Mustang Development Project

Plan of Operations

For Submittal to
Alaska Department of Natural Resources

Revision 1 – December 12, 2012

Brooks Range Petroleum Corporation
510 L St., Suite 601
Anchorage, AK 99501

CONTROLLED DOCUMENT TRACKING INFORMATION

DATE	EDITOR	EDITS
October 19, 2012	Wiggin	DNR Plan of Operations Submittal
December 12, 2012	Wiggin	DNR Plan of Operations Response

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1. INTRODUCTION AND PROJECT OVERVIEW

Brooks Range Petroleum Corporation (BRPC) proposes to begin development of the Mustang Oil Field during the 2013/2014 construction season. Surface activities will take place within the State lease ADL 390680. This Lease Plan of Operations is presented to the Alaska Department of Natural Resources (ADNR) Division of Oil and Gas in support of its Lease Plan of Operations Application.

The development area is located within the Southern Miluveach Unit [SMU], adjacent to the western boundary of the Kuparuk River Unit [KRU] on the North Slope of Alaska and is approximately 4.5 miles west of existing KRU Drill Site 2M. See attached Figure 1, *"Vicinity Map."* The field will include a central processing facility, drill site, and operations and construction support infrastructure. First oil is planned for 2nd quarter 2014. Civil work associated with the development will include opening a gravel mine for source material for building roads and the central production and drilling pad.

The Mustang Development is a proposed development of the Kuparuk "C" sand, the same reservoir as is being produced in the Kuparuk River Field. Maximum oil production rate is predicted will be 15,000 bopd and total expected recovery will be approximately 40 million barrels oil over an expected field life of 20 years. For water flood and reservoir pressure support, Brooks Range will use KRU Seawater Treatment Plant water sourced from the CPF2-to-Alpine seawater line located approximately 1,000 feet west of the location. Power for process facilities and non-process infrastructure will be generated onsite with dual-fuel gas turbine generators. All produced gas volumes not used for onsite fuel gas will be re-injected into the reservoir. Artificial lift will be accomplished using gas lift.

The central processing facility will be a standalone facility capable of producing sales-quality crude oil. The separation process will be a 2-phase separation process including the following primary components: inlet production heater, 1st stage separator, oil treater/dehydrator, crude cooling, crude sales measurement [LACT meter], and shipping pumps. The oil will be transported via pipeline to the Alpine Transportation Company common-carrier pipeline located approximately 1,000 feet away.

Drillsite design will make provision for up to 38 wells on a minimum of 15-foot well centers. The wells will be housed in standard unheated well shelters. Surface safety valves with associated hydraulic control panels will be located in the well house. All production and gas injection wells will also have sub-surface safety valves actuated with the hydraulic control panel. Allocation of producer well volumes will be accomplished using a test separator for testing of individual wells in accordance with state regulations.

In addition to central process facilities and the drill site facilities associated with the wells, the Mustang Development will also include support infrastructure(non-process) such as an operations camp for staff housing, an operations support center with

warehousing, maintenance, offices, and control room. During construction phase, the site plan includes provision for a construction camp and a construction support complex.

Sections 2, 3, and 4 provide detail relative to the Project Elements, Individual Project Components, and Project Schedule.

2. PRIMARY DEVELOPMENT ELEMENTS

The overall scope of the development includes the following major project elements: 1) gravel mine, gravel roads, and gravel production pad; 2) central process facilities, drill site facilities, and cross country pipelines; 3) non-process infrastructure including buildings and equipment; 4) communications tower and related hardware; 5) injection and production wells; 6) temporary drilling support facilities, vehicles, and equipment.

As a standalone oil field, the Mustang Development will have only two pipeline connections to non-Mustang process facilities/pipelines; 1) an approximately 6" diameter crude sales pipeline will connect to the Alpine Transportation Company 14" diameter crude sales pipeline, and 2) an approximately 6" diameter water pipeline will connect to the Alpine 12" source water pipeline, both approximately 1,000 feet from Mustang pad.

3. DEVELOPMENT ELEMENTS AND ASSOCIATED COMPONENTS

As a standalone, independent oil field, the Mustang Development will necessitate installation of many of the same facility and project components associated with other North Slope oil field developments. The Mustang project will include the following major components:

3.1. Gravel Mine, Gravel Roads, and Gravel Production Pad

- Ice roads to support gravel mine development and pad / road construction in 1st and 2nd quarter 2013;
- Development of a gravel mine north of Mustang production pad;
- Build mine access road between gravel mine and production pad;
- Build production pad access road to connect Mustang to KRU road system near KRU Drill Site 2M; and
- Build gravel production pad as location for central production facilities, drill site, and non-process infrastructure.

3.2. Central Process Facilities, Drillsite Facilities, and Cross-Country Pipelines

- Three-phase central processing facility to produce sales-quality crude including modules associated with the following primary processes;
  - Crude heating and separation;
  - Crude measurement and shipping;
  - Gas compression – Gas lift compression, gas reinjection compression;
  - Water separation, treatment, and reinjection;
  - Power generation;
    - Chemical injection module including 4-each <750-gallon DOT tanks for handling of production chemicals.
- 2 each Tank Farms including the following tanks:
  - Tank Farm 1 -- 2 x 750-bbls crude tanks
  - Tank Farm 2 – 1 x 400 bbl diesel storage tank + 1 x 400-bbl Methanol Tank
- Well tie-ins, pipe rack, headers, and well test separator for production allocation;
- 6" oil pipeline for transport of sales-quality Mustang oil to the Alpine Transportation Company pipeline;
- 6" water pipeline for transport of seawater from the CPF2 to Alpine source water pipeline to the Mustang Field; and
- Pipe rack and ancillaries for up to 38 production and injection wells and associated well tie-ins.

3.3. Non-Process Infrastructure Including Buildings & Equipment

- Buildings will include:
  - Operations / Drilling Camp ~ 120-bed
  - Temporary Construction Camp ~ 150-bed
  - Operations Support Center [OSC]
    - Warehouse
    - Maintenance facility
    - Storage
    - Offices
    - Process Control room
  - Temporary Construction Support Center [CSC]
    - Warehousing and issue counter
    - Welding
    - Laydown
    - Maintenance
- Non-process equipment and vehicles will potentially include:
  - Rolling stock such as loaders / vacuum trucks / diesel fuelers
  - Light Plants / portable generation
  - Passenger vehicles / transport buses / work trucks

3.4. Communications infrastructure

- Tower and Communications Module

3.5. Wells

- Initial 12 producers and 11 injectors with provision for up to 38 wells on 15 foot well centers

3.6. Temporary drilling support facilities / vehicles / equipment

- Rig
- Cuttings Bins
- CRI Grind & Inject
- Storage Connex
- Tanks
  - Fuel
  - Water
  - Bleed
- Generators
- Camp
- Support Shacks
  - Portable Welding
  - Mud Lab
  - MWD
  - Geologist
  - Security
- Shops
  - Electrical Shop
  - Truck Shop
- Light Plants
- Heaters
- Man Lift
- Crane
- Picker
- Vehicles
  - Pick-ups
  - Transport Van
  - Water Truck
  - Loader

4. DEVELOPMENT SCHEDULE

The schedule for the project is attached as Figure 2, *"Mustang Development Schedule."* The schedule is separated into two focus areas: 1) Permitting and 2) Surface Facility and Plant.

Permitting is ongoing and submittals for the three longer-term permitting efforts, the 404 Wetlands Permit, ADNR Material Sale, and the air permit are in progress. See Section 12 for a listing of applicable permits for the Mustang project. All other permits applications will be submitted as dictated by the project schedule and permit lead times.

Surface Facility and Plant schedule milestones for engineering, fabrication and construction are included in the lower half of Figure 2. Generally speaking, engineering in 2012 will be focused on supporting permit activities, procuring long lead engineered equipment, supporting gravel installation activities to occur in early-2013, and to support detail engineering in support of all 2013 procurement, fabrication, and installation activities.

Module fabrication will begin 3rd quarter 2013 and will continue through end-of-year 2013. The first significant North Slope construction activities associated with Mustang will be in 1st quarter 2013 with development of the gravel mine approximately 3,500 feet north of the Mustang location and with the building of the gravel roads and production pad. Throughout the summer of 2013, gravel-conditioning operations will continue in preparation for 4th quarter 2013 surface facility installation. Installation of surface facility modules and equipment and all associated piping/electrical/instrumentation interconnect work will begin 4th quarter 2013 and will continue through 2nd quarter 2014. Functional checkout and commissioning operations are planned for 1st and 2nd quarters 2014. Field start-up and first oil is targeted for the 2nd quarter 2014. Development drilling of approximately 23 wells will begin 1st quarter 2014 and continue for approximately 2 years.

5. THE SURROUNDING AREA AND DETAILED SITE PLAN

Figure 1, *"Vicinity Map"* shows the proposed location relative to the surrounding area and existing Kuparuk drill sites and infrastructure. Figures 3, *"Plan View Road" a (West) / b (Central) / c (East),* provide more detail views of the road route between Kuparuk Drill Site 2M and the production pad and also between the production pad and the mine. Figure 3 also provides topographic detail along the routes and in the area. The site plan that provides a detail view of the production pad design along with all project components and elements, including wells / facilities / drilling / support infrastructure is included as Figure 4, *"Mustang Civil – Site Plan".* Included in this *"Mustang Civil – Site Plan"* is the module list indicating a module count of 32 modules / structures and components.

6. HYDROLOGICAL ENVIRONMENT

6.1. Hydrology

Hydrology on the North Slope is heavily influenced by the arctic climate, which results in a thick layer of permafrost. Rivers in the vicinity of Prudhoe Bay cross the plain in complex channels and form large complex deltas at their outfall to the Arctic Ocean. The low relief of the plain results in low-gradient, meandering, and braided systems. Overland flows that are unconfined by defined channels are also prominent, especially during spring break up, and can convey substantial discharge (Hinzmann et al., 1993).

Hydrologic conditions of the project area follow the pattern of the surrounding ACP. The annual hydrograph is dominated by spring flooding, following ice break-up. Fall rains also raise stream levels but during the remainder of the year, conditions are at or near base flow. Stream systems are very "flashy" which means water level stages rise and fall quickly in response to precipitation events. This phenomenon happens because surface run-off is prevented from percolating downward by an impermeable permafrost layer and instead rapidly fills stream channels and is quickly transported downstream.

In spring, during breakup, ice jams can dam river channels and cause flooding. Ice can cause a variety of hydrologic/surface flow conditions that are difficult to predict and may change over time and year to year.

6.2. Miluveach River

The proposed project location is immediately to the East of the Miluveach River, a tributary to the Lower Colville River, which enters the East Channel of the Colville River Delta approximately 8.7 miles from the ocean. The Miluveach River drains the north slope of the Brooks Range and originates from several lakes located in the foothills. The River has a meandering pattern and deposits alluvial sediments (sand and gravel) as point bars along the inside bends of the riverbanks. The floodplain is approximately 0.5 miles wide adjacent to the proposed project area. The pad is planned to be located above a relic terrace outside of the active floodplain directly to the east of the river on tundra that is approximately 48 feet above mean sea level (MSL).

Basic hydraulic analysis of the Miluveach River, at the proposed project site, concluded that the 100-year estimated water surface elevation is well below the proposed pad elevation of 68-feet. Based on the proximity of the proposed pad in relationship to the Arctic Coast, storm-surge influences are not anticipated at the project site. Consequently, the risk of flooding or erosion of the pad, with respect to the 100-year flood event, is minimal.

6.3. Lower Colville River and Colville Delta

The MDP does not cross any streams, but does lie within the Colville River drainage basin. The Colville River is one of the largest rivers on the North Slope and has the largest delta area of all rivers on the ACP. The river originates in the western Brooks

Range and flows north and east across the ACP to the western Beaufort Sea approximately 120 miles west of Prudhoe Bay. The Colville River basin is 375 miles long, and drains a re-mote tundra area on the north side of the Brooks Range entirely north of the Arctic Circle. The river is frozen over for more than half of the year. Breakup and peak discharge occur over a three-week period in late May. Because the region is underlain by continuous permafrost, the river is effectively isolated from deep groundwater (McNamara 1997).

6.4. Channel Patterns

Channel patterns are formed during high water flow during summer rainfall events. The highest flows are generally in late spring and are fed by ice and snow melt. Although the spring flows are higher (overbank flows occur annually), they are less likely to carve new channels because the riverbanks are still frozen during spring (MMS 2007). Wide fluctuations in seasonal flow are often intensified by shallow permafrost conditions.

In the spring, initial snowmelt from the upper basin flows over the frozen river surface and ponds behind snowdrifts and icings. As breakup progresses, these obstacles thaw or are overtopped, and the melt water is released downstream, until it ponds at snow or ice barriers further downstream. This storage-and-release process produces peak stream discharge (MMS 2007). River flows are minimal in winter. Spring breakup flooding begins in May, and flows continue through the summer and stop at freeze-up in early October.

To maintain overland flow, surface water equilibrium, and hydrologic connections between and within wetlands, 50 culverts would be installed along the gravel access roads. Preliminary locations of these culverts are illustrated in Figure 5.2. The culverts at a minimum will be 24 inches in diameter and designed to maintain drainage during spring breakup and summer/fall precipitation events.

7. GRAVEL – MINE AND ROADS AND PAD

BRPC, with geotechnical support from Golder Associates, successfully explored for gravel in the 1st and 2nd quarters of 2012. Sufficient gravel resources were discovered to meet all the needs of the Mustang Development project. BRPC is proposing to permit a 41.6 acre, approximately 1.3 million cubic yard gravel extraction site approximately 4,000 feet northwest of the Mustang Development pad. The mine site will be developed as two separate area – the Primary Resource Area and the Contingent Area. The Primary Resource Area consists of the southern ~ 29 acres of the overall area for the identified gravel resource area. This Primary Area will be excavated to a depth of approximately 30 to 40 feet below ground surface. Mining of gravel resources in the Primary Area—only a portion of the overall identified resources in the area—should meet all the projected needs of the proposed Mustang development including roads and production pad. The Contingent Area, the northern ~ 12 acres of the identified gravel

resources would only be developed to meet a gravel shortfall related to the Mustang Development during initial gravel construction in early-2013 or as needed for some future development or maintenance operation.

TABLE 7.1: SUMMARY OF MUSTANG GRAVEL REQUIREMENTS

Element	Length	Fill Volume (CY)	Surface Area (SF)	Surface Area (Ac)
Access Road		207,222	1,268,200	29.1
Mine Road	3,582	26,477	176,990	4.1
Pad	-	276,750	842,320	19.3
Mine Berm	4,483		218,000	5.0
Overbuild		102,090		
Mine	-	-	1,811,132	41.6

To construct the gravel road, an ice road will be built alongside the proposed route of the gravel road. A 3-acre ice pad will be constructed approximately 1 mile from the mine site adjacent to the ice road for staging and maintenance of equipment. Additional equipment will be brought in to commence mining operations.

The organics and overburden will be mechanically stripped and stockpiled. The organics will be stored on an ice pad within the boundaries of the second phase of the mine site. Mining operations will use explosives to loosen the gravel. The usable material is in a relatively narrow band. It is anticipated the shot depths will be in the range of 10 to 20-ft. Explosive storage, use, and disposal will be conducted in accordance with a blasting and explosive plan based on all applicable federal, state and local regulations. Note that the location was chosen to provide a minimum 400-ft setback from any fish-bearing waters.

Operations will be conducted around the clock. BRPC will have management and health, safety, and environmental (HSE) oversight onsite and will a designated point contact. Office and housing locations have not yet been established. Bulldozers will supply the blasted gravel to large loaders, which will fill the specialty gravel haulers (MaxiHauls/B70s) with upwards of 60 cubic yards per load.

Gravel quantities excavated will be measured by signed daily load-count logs. BRPC will enter into a Material Sales Contract with the State of Alaska and will pay the required royalty directly to the State. At the conclusion of mining operations, BRPC will rehabilitate the mine site in accordance with the Mining and Rehabilitation Plan to ensure that the mine site is left in a suitable state.

8. WATER SUPPLY FOR CONSTRUCTION AND LONG-TERM OPERATIONS

8.1. Water Volume Requirements

Water will be used during all phases of the Mustang Development. During gravel mining and road construction phase of the project, permitted lake water will be needed for the construction of ice-road(s) and an ice pad. During surface facility construction activities in late 2013 and early 2014, water will be needed primarily for dust control and road maintenance. Water will also be needed during developmental drilling to support rig operations. Upon field startup of operations for the Mustang Development, water for dust control operations and possibly to provide potable water for permanent staff will be required.

Ice roads will be constructed to support gravel mining, construction of the gravel roads, and construction of the gravel production pad. The necessary ice roads that will roughly parallel the gravel road routes will use approximately 5.5 million gallons of water. A 5-acre ice pad will be constructed for the camp and miscellaneous staging. Construction of this 5-acre camp pad will use approximately 1MM gallons. An ice storage pad will necessitate 4.8MM gallons. Total consumptions of lake water during 1st and 2nd quarters of 2013 to support gravel operations is approximately 11.1MM gallons.

Drilling operations will need approximately 10,000 gpd water per rig, or approximately 300,000 gallons per month of drilling activity per rig with one rig operating. Potable water for the rig crew is estimated to be 12,000 gallons per day for 120 drill rig and operations staff; however, at this time, there are no plans to use local water sources for generation of potable water. Once drilling is completed, water needs will be less than 10,000 gpd for dust suppression and other operational uses. Approximately 3,500 gpd of potable water will be required for the 35 operations staff that will remain at the Mustang Development from the initiation of operations to the end of field life.

Table 8.1 identifies the sources, quantities, and needs of water proposed for the project. The sources are identified in Figure 6, *"Permitted Water Sources Near Mustang"*.

TABLE 8.1: SUMMARY OF PROJECT WATER REQUIREMENTS

Phase	Proposed Use	Approx Duration	Quantity (Gallons)	
			Daily	Total
Gravel Mining and Placement	Ice Road and Pad	January 1, 2013 – June 30, 2013	---	11,100,000
				NA
Construction	Dust Control			
Operations	Dust Control	2nd qtr, 2014 – End of Field Life	10,000	1,200,000/year
	Potable Water (35 Staff)		3,500	1,277,500/year

Table 8.2 summarizes estimated water requirements by calendar year, which is how volume limits are expressed in the temporary water use permits (TWUPS) currently authorized to BRPC from Alaska Department of Natural Resources (ADNR). As with seasonal exploratory drilling activities, BRPC will need to coordinate water use closely with other permit-ted users for water bodies shared by multiple users. This is particularly important during calendar years 2013 and 2014 when water requirements are at their highest.

TABLE 8.2: SUMMARY OF ANNUAL WATER REQUIREMENTS 2013-END OF FIELD LIFE

Activity	Water Use (Gallons Per Year)			
	2013	2014	2015	2016+
Gravel Extraction	11,100,000	--	--	--
Construction	1,200,000	1,200,000	--	--
Developmental Drilling		3,650,000	3,650,000	--
Operations	--	1,277,500	2,477,500	2,477,500
Total	12,300,000	6,127,500	4,927,500	2,477,500

8.2. Existing Water Sources Permitted by BRPC

BRPC desires BRPC has multiple TWUP permits for which ADNR has authorized specific water volumes. Table 8.3 summarizes the water available to BRPC through its existing TWUPs, which are in close proximity to the proposed Mustang Development. For certain permits, a single water volume limit has been issued for all of the sources listed in the permit, rather than individual limits. Source-wide limits have been identified in some of the permits where multiple users share the same water source. These limits are provided in Table 8.3 below, as well. BRPC will use these water resources preferentially to those located father away, when possible. BRPC has actively coordinated use of these water resources with other users in the past when these lakes were used as water sources for exploration and will continue to coordinate water use during the Mustang Development project. The sources identified in Table 8.3 are adequate for meeting BRPC's water requirements during all phases of the Mustang Development project. However, since all of the sources listed below in Table 8.3 are shared resources, BRPC may need to withdraw water from its other permitted water resources to meet its water requirements if water coordination efforts determine that the maximum water withdrawal volumes for each course will be reached. These additional water resources include those lakes listed in Tables 8.3 and 8.4, below.

TABLE 8.3: AVAILABLE WATER FROM SOURCES PERMITTED BY BRPC NEAR MUSTANG DEVELOPMENT

Permit	Lake	Permitted Volumes (Gallons Per Year)		Shared Resource
		BRPC	Source-Wide	
A2007-91	Kuparuk Mine Site C	30,001,141 (all sources combined)	368,700,000	Yes
	Kuparuk Mine Site F		28,500,000	Yes
	K201		4,000,000	Yes
	K209		6,000,000	Yes
	M9514		9,060,000	Yes
	L9334		58,500,000	Yes
A2007-90	ASRC Mine Site			Yes
	M9601		12,530,000	Yes
	M9602		780,000	Yes
	M9603		8,720,000	Yes
	M9605		8,520,000	Yes
A2010-136	K214	14,000,000	--	Yes

Five additional water sources permitted by BRPC under A2009-113 are listed in Table 8.4. Water resources listed in Table 8.4 are the nearest water bodies proximal to the Mustang Development; however, due to additional associated water withdrawal restrictions, BRPC will coordinate water usage.

TABLE 8.4: PERMITTED WATER VOLUMES UNDER BRPC TWUP A2009-113

Permit	Lake	Permitted Volumes (Gallons Per Year)			
		BRPC		Source-Wide	
		Water Source Specific Restrictions	Total Permitted Volume	Permittable Winter Water	Annual Permittable Volume
A2009-113	L9120	Ice Only	26,068,114 2,000,727 (daily max)	0	11,300,000
	L9121	290,000		290,000	33,230,000
	L9122	Ice Only		0	19,800,000
	L9123/K210			--	78,400,000
	M9515			--	5,420,000

Additional water sources permitted by BRPC that are located farther afield from the proposed Mustang Development are provided in Table 8.5. The water resources listed in Table 8.5 are closer to BRPC's Beechey Point Unit than the Southern Miluveach Unit in which the Mustang Development is located. If BRPC uses any of the water bodies listed in Table 8.5 to support its Mustang Development, it will coordinate water use with all other permitted users to ensure source wide limits are not exceeded.

TABLE 8.5: ADDITIONAL PERMITTED WATER SOURCES PERMITTED BY BRPC

Permit	Lake	Permitted Volumes (Gallons Per Year)		Shared Resource
		BRPC	Source-Wide	
A2007-124	Unnamed Lake	4,000,000 (ice aggregate)	--	Yes
	Unnamed Lake		--	None Listed
	Unnamed Lake		--	None Listed
A2008-160	RO886	13,838,910	20,440,000	None Listed
	RO897		22,740,000	None Listed
	RO887		16,420,000	None Listed
	RO894		0	None Listed
	RO896		19,340,000	None Listed
A2008-161	RO888		45,280,000	None Listed
	RO891		83,820,000	None Listed
	TBA-8		11,300,000	None Listed
	RO895		17,400,000	None Listed
	RO889		30,000 water 4,000,000 ice	None Listed
A2009-88	Kuparuk Reservoir 4	39,500,000	48,550,00	Yes
	Kuparuk Reservoir 5		149,890,00	Yes
	119-1		20,140,000	Yes
	119-2		2,260,000	Yes
	119-3		44,690,000	Yes

For those water sources shared by other users, BRPC is actively engaged in water withdrawal coordination.

8.3. Other Potential Water Sources

Other potential winter water sources include the lakes located in Sections 9, 10, 15, 16, 21, 22, and 23 of Township 011N, Range 013E, which BPXA has gained water withdrawal authorization under TWUP A011-83. Under this authorization, BPXA can withdraw 150.8 MGY from the five water sources within the above sections of Township 011, Range 013E. BPXA has applied for water rights for the following water bodies including Kuparuk Reservoirs 4 and 5:

- Section 1 (LAS 28151) – 9.5 MGY
- Sections 6, 31, and 32 (LAS 28253) – 65.2 MGY from Kuparuk Reservoirs 4 & 5
- Section 9 (LAS 28140) – 12.4 MGY
- Section 15 (LAS 28139) – 38.1 MGY
- Section 16 (LAS 28141) – 17.7 MGY

These water rights, if issued, will impact the water available to TWUP permittees. Water availability will need to be coordinated with BPXA for these water sources.

9. OPERATIONS AND MAINTENANCE

Mustang field operations will be a 24-hour operation year round. Given that the process facilities being proposed are small modules compared to typical North Slope installations, operations and maintenance will be simple and straightforward compared to the large neighboring facilities. Control system design for modules will allow for minimally attended operations, where possible. On-site staff will conduct routine maintenance such as calibrations and lubrication. Specialized maintenance activities such as major equipment overhauls will be performed by external maintenance contractors or by equipment representatives on an as-needed basis.

Manpower planning for field operations in ongoing; however, latest manpower estimates to support field operations suggest a long-term and continuous staff level onsite of approximately 15-20. This operations and maintenance staff level reflects the number of staff needed to operate and perform routine maintenance on the facilities and wells. This number does not include staff for minor and/or major capital expansions, well interventions, significant and non-routine surface equipment maintenance, or regulation-stipulated onsite work.

9.1. Safety Considerations

9.1.1. Fire and Gas System and Firefighting

Systems for fire detection, protection, and suppression will meet the requirements of the State of Alaska Fire Marshal and will be designed in accordance with API Recommended Practice 14G. The system will monitor all facilities and provide status information to the control room. Both automatic and manual fire and gas detection will be provided, as well as automatic systems for isolation, depressurization and ventilation.

9.1.2. Telecommunications

Mustang operations will have the telecommunications systems necessary to assure contact with other company operations and with emergency response personnel. The system will be tied into the local North Slope network and the national telephone network, and the mobile radio system will be linked to Alaska Clean Seas for spill response.

9.1.3. Equipment Identification and Information Management

BRPC will implement an equipment identification system consistent with industry tagging conventions and BRPC's information management system. Tag numbering will be used for equipment and instruments so that proper maintenance and replacement can be carried out. The information management system will incorporate the tag number system and will also include a series of manuals and operating procedures for the Mustang facility.

9.2. Spill Prevention, Detection and Response

The Mustang facility and operations will be designed with spill prevention and detection as the highest priority. A spill prevention, control and countermeasures (SPCC) plan will be developed for the Mustang Development in accordance with U.S. Environmental Protection Agency regulations, and an Oil Discharge Prevention and Contingency Plan (ODPCP) will be prepared in accordance with Alaska Department of Environmental Conservation (ADEC) regulations to cover drilling, production, and oil transportation. These two documents will cover spill prevention, detection and response. Furthermore, BRPC is a member of Alaska Clean Seas, which will provide rapid spill response to any incident at the Mustang Pad.

10. WASTE MANAGEMENT

The waste management strategy developed for the Mustang project consists of waste minimization to the greatest extent possible, with re-use and recycling incorporated where possible. Waste generated during drilling, construction, and production operations will be handled according to procedures found in the *Alaska Waste Disposal and Reuse Guide*, also known as the "Red Book." This guide is periodically updated as needed to conform with new regulatory requirements, standard operating procedures, or changes in facilities or operations.

The following sections discuss disposal strategies for each project phase (construction, drilling and production) and identify management options for the wastes expected to be generated during the project.

10.1. Drilling Waste Management

Drilling wastes (including drilling fluids, cuttings, rig wash, and other exempt wastes) will be managed by a combination of methods, including transport and injection into an approved Class II disposal well at other North Slope sites (e.g., grind-and-inject facility at PBU Drill Site 4) through a Ballot Agreement with the PBU owners or at the similar facility at Kuparuk River Unit until a Class II injection well can be permitted and established on site. Permitting for the proposed Class II well will be initiated in 2013.

Prior to disposal, drilling wastes will be temporarily contained in tanks or a lined storage area on the gravel pad, as appropriate for the type of waste. The storage cell dimensions are designed to contain all of the waste and any anticipated precipitation that may accumulate in the area. The storage cell will be lined with an impermeable membrane that is chemical-resistant, weather-resistant and leak-proof. The liner will be compatible with drilling waste, and no other waste types will be stored in the enclosure. Alternatively, metal bins may be used for temporary cuttings storage prior to disposal. BRPC will perform periodic visual inspections of the storage area to ensure that it complies with ADEC 18 AAC 60.430 regulations and all applicable permit stipulations. These visual observations will be recorded to document that cuttings and fluid are not escaping the lined storage cell. Observations regarding the integrity of the storage cell

liner will be recorded and any problems noted. Corrective action would be implemented immediately if any damage or tear to the liner were observed. The liner would be repaired according to manufacturer's specifications.

Drill cuttings and other exempt waste will be disposed of in the appropriate well type, depending on waste classification. Spent drilling fluids and other liquid exempt wastes will be transported off-site for disposal at Class II or Class I facilities at PBU or KRU. Upon completion of a Class II injection well at the Mustang Development, drilling waste will be disposed of on-site. Any waste not meeting the requirements for Class II well injection will be transported to Class I facilities at PBU or KRU. Each time drilling cuttings are removed from temporary storage onsite, the drilling supervisor will conduct a visual inspection of the storage area to verify all permit requirements are met. BRPC plans to remove all waste within one year of completing the development drilling operation. All waste disposal procedures will conform to local, state and federal regulations.

10.2. Construction and Production Operations

Any wastes generated by construction and production operations will be handled in accordance with the Alaska Waste Disposal and Reuse Guide (the Red Book). Details by waste stream are described below:

- Sanitary Waste: Waste from on-site portable and temporary restroom facilities will be hauled off-site or the units exchanged regularly. All waste from temporary construction camp or the long-term operations camp will be collected onsite in appropriate tankage and North Slope Borough will be contracted for waste pickup and handling in Deadhorse. Wastewater will be handled at the NSB wastewater treatment plant in Deadhorse.

- Solid Waste---Non-Hazardous: Solid waste will be transported to the North Slope Borough facilities in Deadhorse for disposal at the NSB Oxbow Landfill or for recycling at an appropriate facility. Note that food waste will only be placed in dumpsters that will be equipped with animal-proof lids.

- Produced Water: Water produced from the oil reservoir as a part of produced fluids will be injected back into the producing reservoir for pressure support and enhanced oil recovery in accordance with AOGCC regulations.

- Contaminated Gravel or Soil: This material will be properly stored until it has been characterized and the disposal options have been evaluated. Clean gravel is not a waste and will be stockpiled for reuse. Waste determined to be nonhazardous will be stored in an approved storage area for future remediation. Contaminated gravel/soil that has been determined to be hazardous waste will be stored in an on-site hazardous waste storage area until shipped off-site to a permitted facility.

- Non-Hazardous Oily Waste: Solid waste containing oil will be segregated and properly stored in an oily waste dumpster and transported to the NSB incinerator

in Deadhorse for disposal. Used oil will be characterized to ensure it is suitable for recycling or will be disposed of properly.

- Used Non-Hazardous Fluids: These include such fluids as rinsate from tank cleaning, sump fluids, and contaminated snowmelt. Such fluids will be re-used or recycled, if possible. Reuse options include make-up water for drilling operations or for enhanced oil recovery. If the fluids cannot be reused, they will be tested to ensure they are non-hazardous and will be sent for proper off-site disposal at the PBU Pad 3 Class I well or similar approved site.

- Storm Water: BRPC will prepare and implement a storm water pollution prevention plan (SWPPP) under an EPA-approved storm water discharge permit.

- Hazardous Waste: Resource Conservation and Recovery Act (RCRA) requirements will be followed for the storage, handling, and disposal of any hazardous waste generated. Waste will be accumulated in on-site satellite accumulation areas and then transported to approved facilities in the Lower 48.

11. PERMITS AND APPROVALS

The Mustang Development Project is subject to federal, state and local approvals as listed in Table 11.1 below.

TABLE 11.1: MUSTANG PERMIT AND APPROVAL MATRIX

AGENCY	PERMIT/APPROVAL	SCOPE AND JURISDICTION
FEDERAL		
U.S. Army Corps of Engineers	Section 404	Fill in wetlands (waters of the U.S.) including pads, road and mine site
U.S. Environmental Protection Agency	North Slope General NPDES Permit (Notice of Intent and supporting documents)	Wastewater discharges from camp facilities and dewatering mine site
	Spill Prevention, Control and Countermeasures (SPCC) Plan	Fuel storage and handling
U.S. Fish and Wildlife Service	Polar Bear Letter of Authorization (LOA)	Incidental disturbance of polar bears (construction and operations)
	Endangered Species Act Section 7 Consultation (related to federal permit processes)	Project activities that may affect threatened and endangered species (e.g., spectacled eiders, polar bears) – wetlands fill and disturbance
STATE		
Alaska Department of Environmental Conservation, Division of Spill Prevention and Response	Oil Discharge Prevention and Contingency Plan	Spill prevention, response and cleanup measures related to drilling, storage, production and transportation

AGENCY	PERMIT/APPROVAL	SCOPE AND JURISDICTION
Alaska Department of Environmental Conservation, Division of Air Quality	Air Quality Control Minor Permit; Title V Air Quality Control Operating Permit Air Quality Control Minor General Permit (MG1)	Air emission sources – process facilities, drilling and related air impacts (e.g., dust) Drilling operations
Alaska Department of Environmental Conservation, Division of Environmental Health	Temporary Storage of Drilling Waste	Drilling waste storage facility at production and drilling pad (design review)
Alaska Department of Environmental Conservation, Division of Water	Section 401 Water Quality Certification	Section 404 discharges (fill materials) – pads, road
Alaska Department of Natural Resources, Division of Oil and Gas	Lease/Unit Plan of Operations	Surface use to support subsurface development on lease/unit (facilities and activities) – construction and production
	Right-of-Way Easements (Title 38.05)	Surface use for new road and use of existing roads
Alaska Department of Natural Resources, Division of Mining, Land and Water	Land Use Permits	Project surface use and activities outside the lease/unit
	Temporary Water Use	Water extraction from lakes, ponds, rivers
	Material Sales Contract	Gravel extraction from state-owned lands and mine site rehabilitation
Alaska Department of Fish and Game	Title 16 Fish Habitat Permit	Activities and construction in fish bearing waters (rivers, lakes, etc.) including drainage structures, water extraction, and gravel mine dewatering and mine site rehabilitation
Alaska Department of Natural Resources, State Historic Preservation Office	Section 106 Clearance	Project construction activities that may affect archeological, historical, and cultural resources
Alaska Oil and Gas Conservation Commission	Permits to Drill Annular Disposal Area Injection Order Class II UIC well	Production, enhanced oil recovery, and disposal wells (Class II)
LOCAL		
North Slope Borough	Development Permit(s)	Surface use activities within the North Slope Borough including construction, drilling, and production activities
	IHLC Clearance	Project construction activities that may affect archeological, historical, and cultural resources

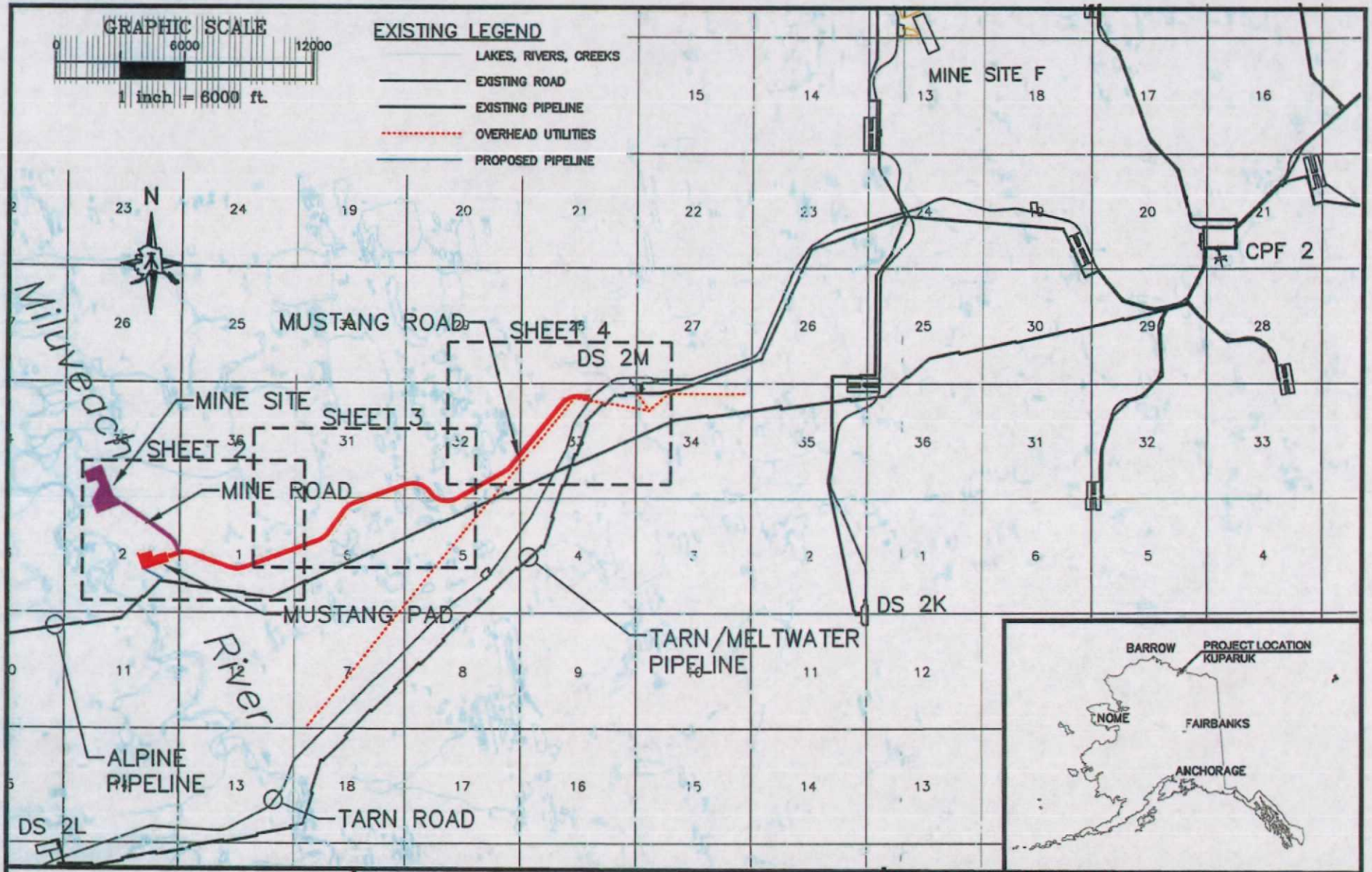
12. ABANDONMENT AND RESTORATION

All Mustang surface facilities will be located on State of Alaska lands. The anticipated economic life of these facilities is estimated at approximately 20 years, although subsequent exploration in the project area may extend that life if additional economic oil resources are identified. The abandonment of the Mustang facilities including surface hardware and gravel pads and road will be dictated and conducted in compliance by/with the following permit and regulatory requirements:

- State of Alaska oil and gas lease conditions
- Alaska Department of Natural Resources permit stipulations and conditions (Lease/Unit Plan of Operations and Land Use)
- Alaska Department of Natural Resources – Mining and Rehabilitation Plan for the Kuparuk Deadarm Mine Site
- Alaska Oil and Gas Conservation regulations related to well abandonment (currently at 20 AAC 25.105-172)
- U.S. Army Corps of Engineers Section 404 Permit
- North Slope Borough Title 19 Development Permit

Specific abandonment activities will be conducted in accordance with the above approvals and regulations as modified or in place at the time of abandonment. Permit conditions and regulatory requirements give the Alaska Department of Natural, the principal permitting agency, discretion with respect to the specific termination and abandonment procedures. Potential future use of the project facilities including pads and access road will also be factors considered by the regulatory agencies with respect to abandonment requirements.

FIGURES

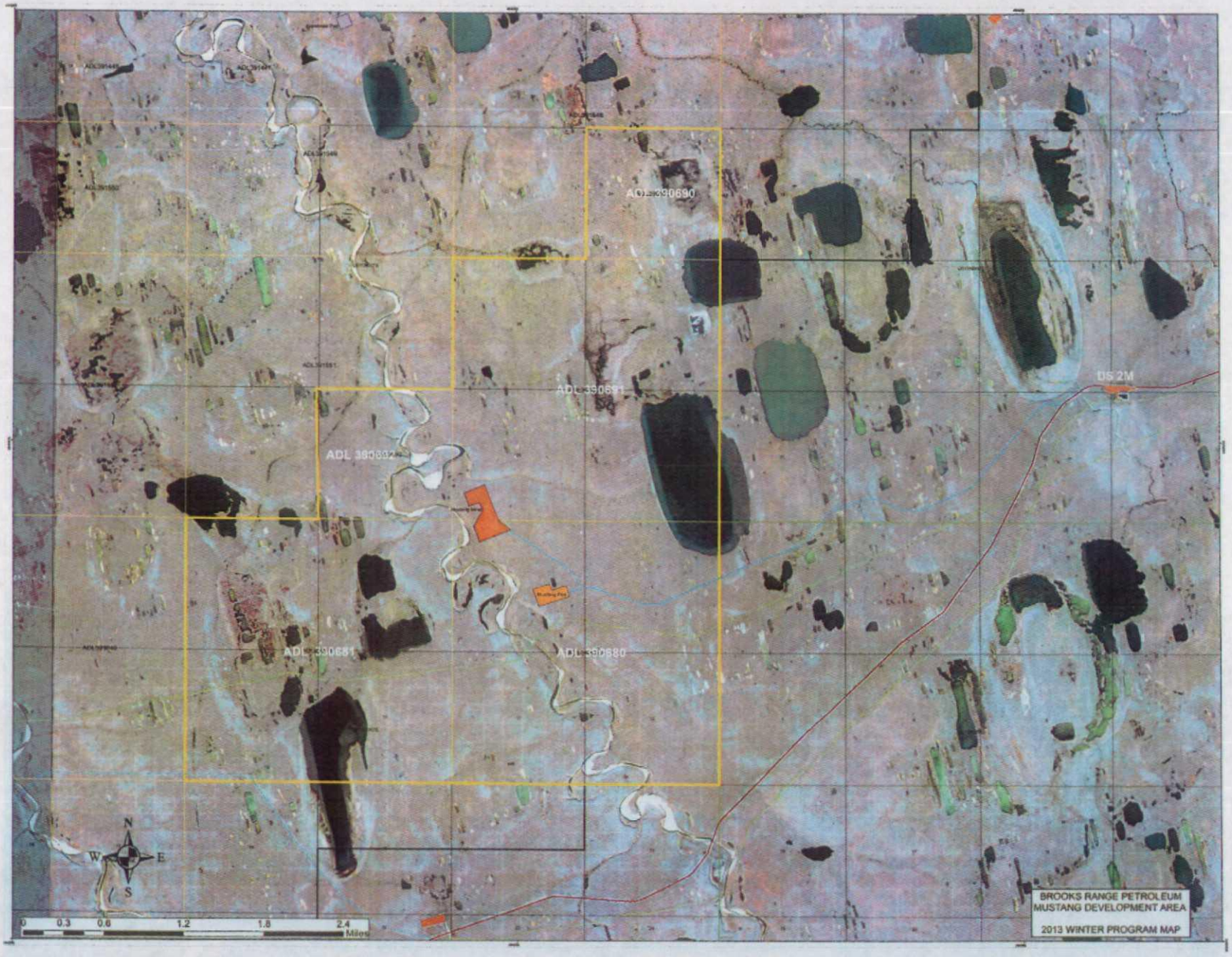


Brooks Range Petroleum

MUSTANG DEVELOPMENT

VICINITY/LOCATION MAP

Applicant: BROOKS RANGE PETROLEUM CORPORATION
Project: MUSTANG DEVELOPMENT
Location: T11N, R7E: T11N R8E: T10N R7E: T10N R8E
Waterbody: MILUVEACH RIVER
Sheet: 1 of 14
Date: JULY 2012


ADL 390690
ADL 390681
ADL 390682
ADL 390681
ADL 390680
DS 2M
N
W
E
S
0 0.3 0.6 1.2 1.8 2.4
Miles
BROOKS RANGE PETROLEUM
MUSTANG DEVELOPMENT AREA
2013 WINTER PROGRAM MAP

Brooks Range Petroleum Company.....Milestones and Schedule.....Mustang Development

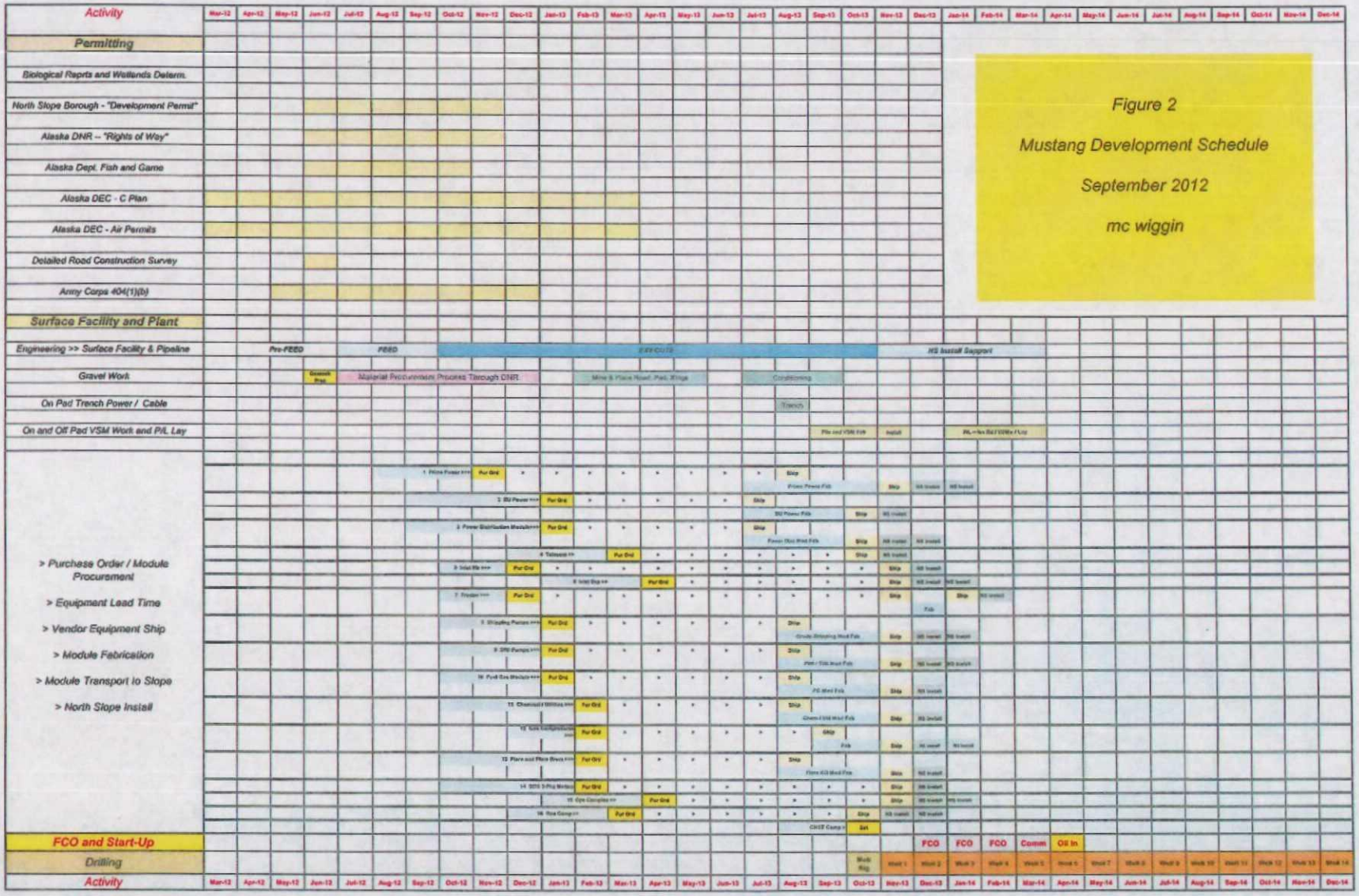
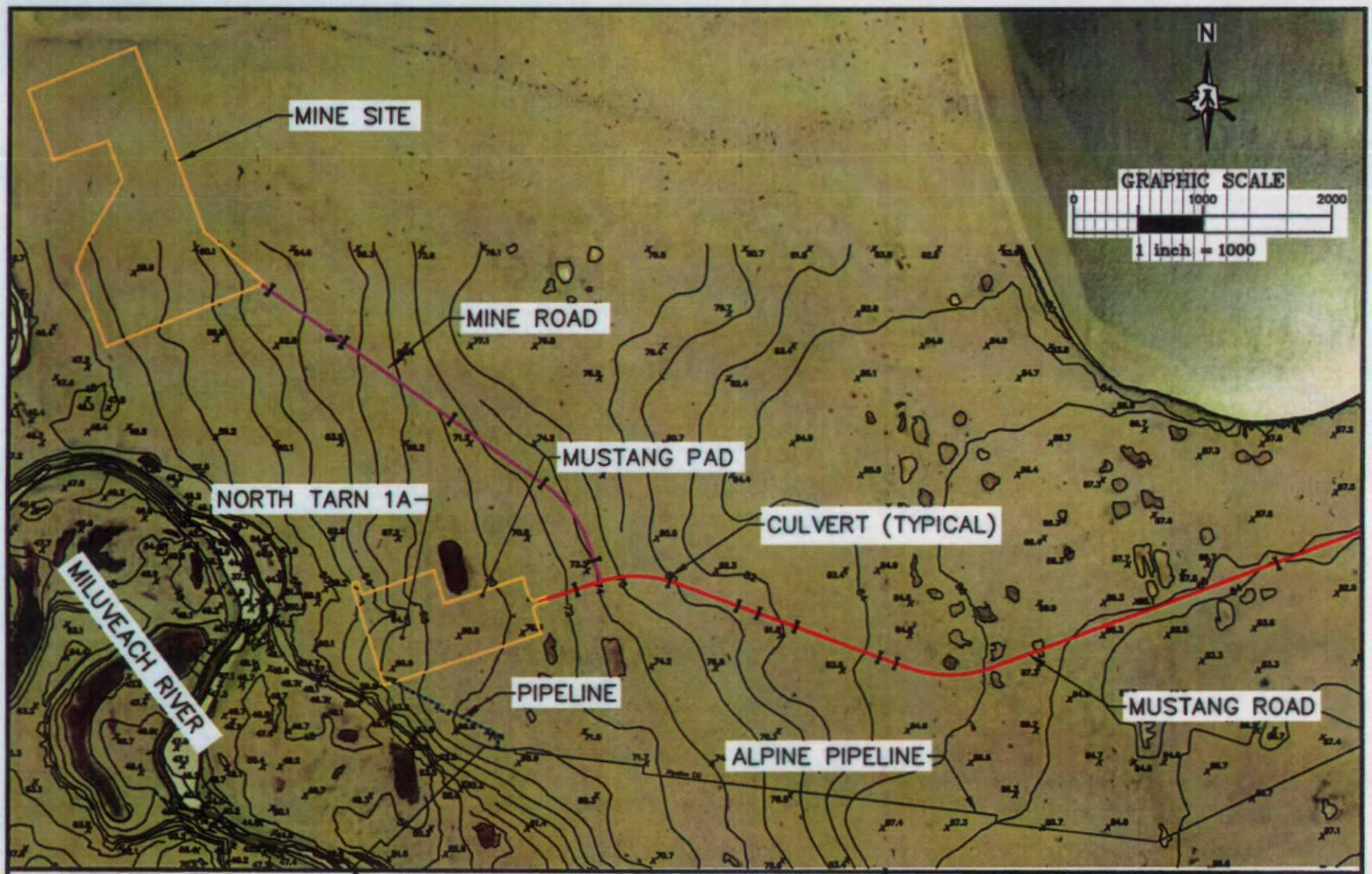


Figure 2

Mustang Development Schedule

September 2012

mc wiggin

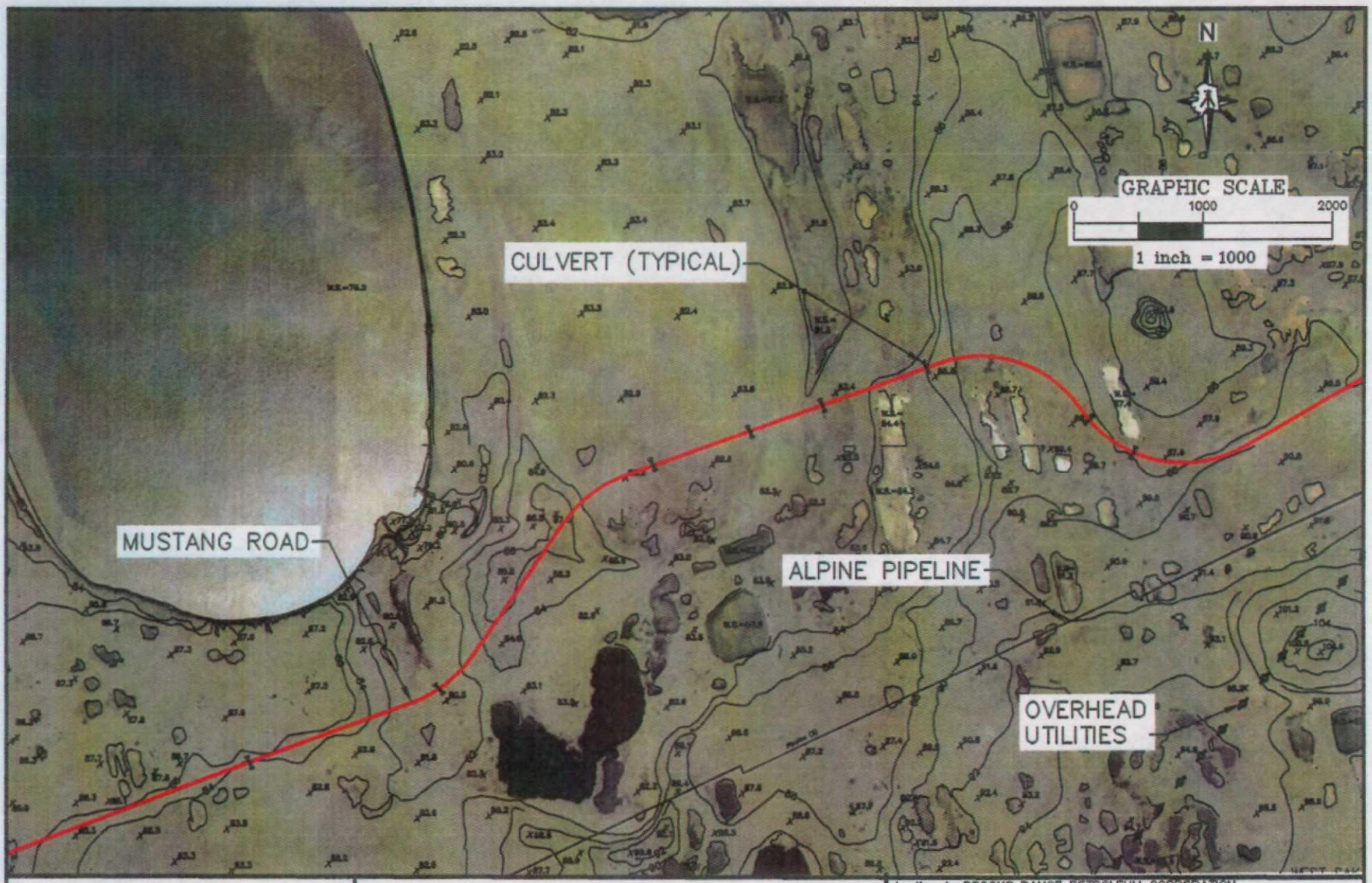


Brooks Range Petroleum

MUSTANG DEVELOPMENT

PLAN VIEW ROAD (WEST)

Applicant: BROOKS RANGE PETROLEUM CORPORATION
Project: MUSTANG DEVELOPMENT
Location: T11N, R7E: T11N R8E: T10N R7E: T10N R8E
Waterbody: MILUVEACH RIVER
Sheet: 2 of 14
Date: JULY 2012

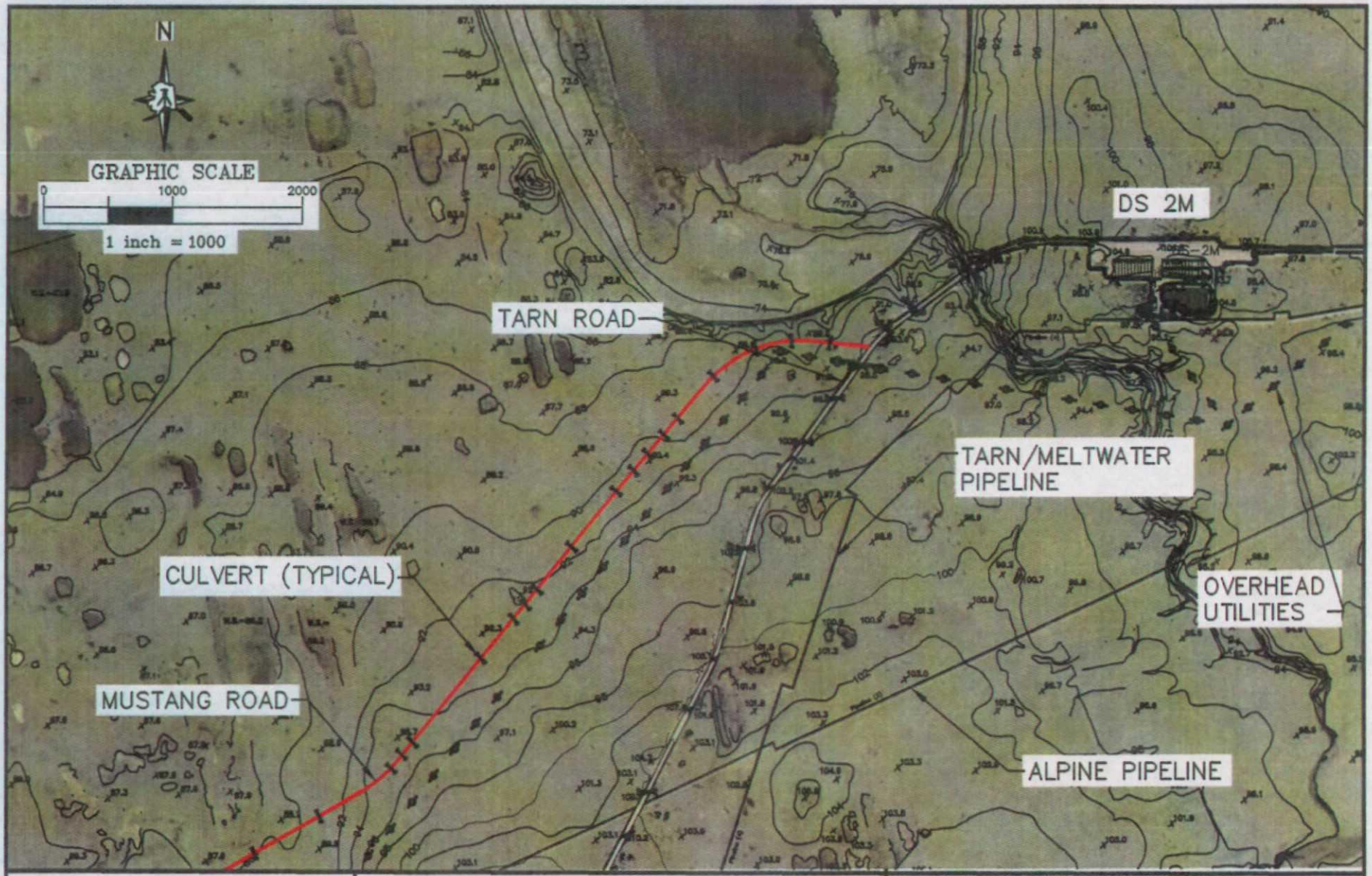


Brooks Range Petroleum

MUSTANG DEVELOPMENT

PLAN VIEW ROAD (CENTER)

Applicant: BROOKS RANGE PETROLEUM CORPORATION
Project: MUSTANG DEVELOPMENT
Location: T11N, R7E: T11N R8E: T10N R7E: T10N R8E
Waterbody: MILUVEACH RIVER
Sheet: 3 of 14
Date: JULY 2012

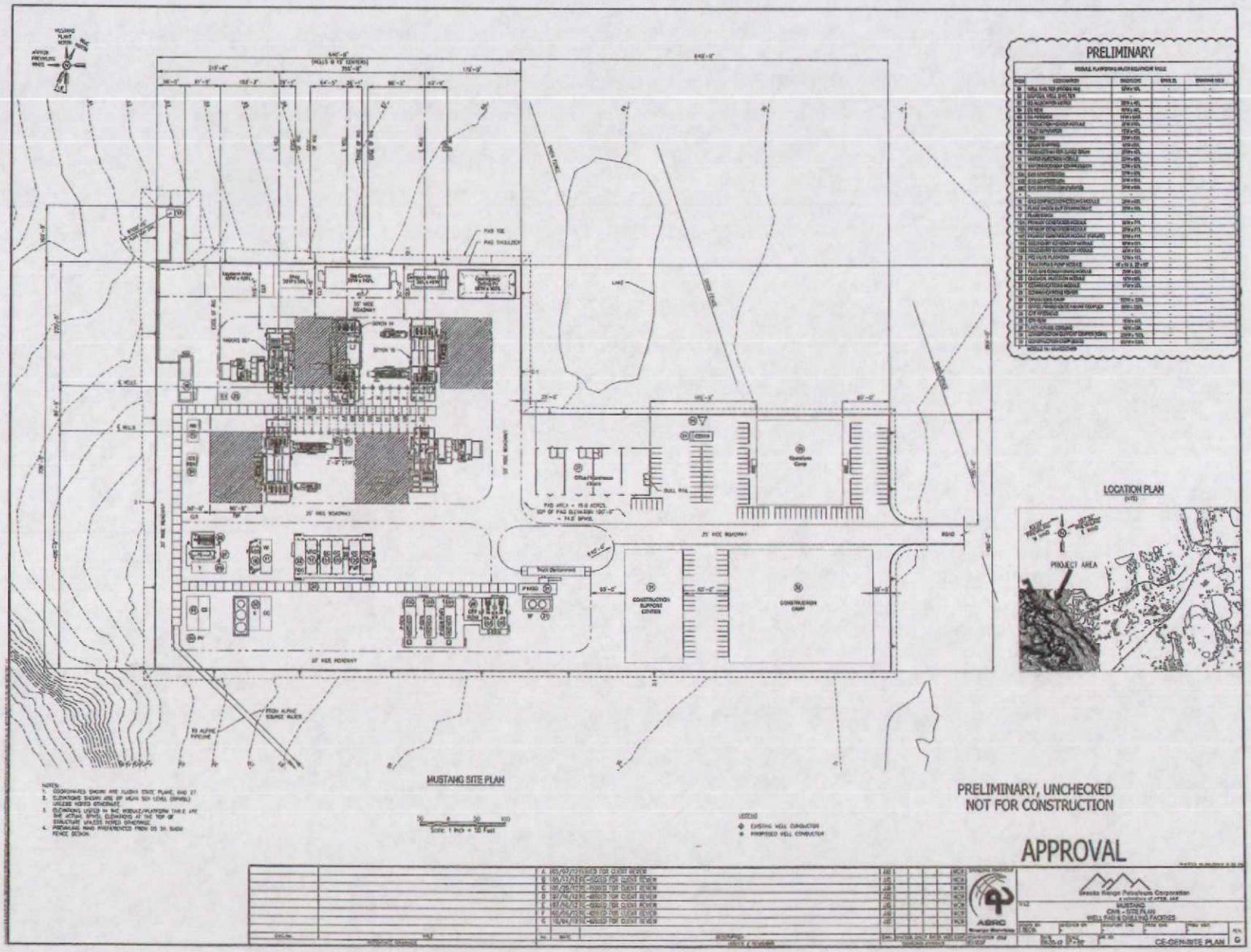


Brooks Range Petroleum

MUSTANG DEVELOPMENT

PLAN VIEW ROAD (EAST)

Applicant: BROOKS RANGE PETROLEUM CORPORATION
Project: MUSTANG DEVELOPMENT
Location: T11N, R7E: T11N R8E: T10N R7E: T10N R8E
Waterbody: MILUVEACH RIVER
Sheet: 4 of 14
Date: JULY 2012


PRELIMINARY
LOCATION PLAN
PROJECT AREA
MUSTANG SITE PLAN
Scale: 1 inch = 50 Feet
PRELIMINARY, UNCHECKED
NOT FOR CONSTRUCTION
APPROVAL
Arctic Slope Regional Corporation
MUSTANG
CIVIL - SITE PLAN
WELL PAD & DRILLING FACILITIES
CE-GEN-SITE PLAN

Mustang Pad, Road, Mine Quantities
11 039

AREAS OF IMPACT Edit Date: 7/17/2012

Element	Length	Surface Area (SF)	Surface Area (Ac)
Access Road	23,108	1,268,200	29.114
Mine Road	3,582	176,990	4.063
Pad		842,320	19.337
Mine Berm	4,483	224,150	5.146
Mine		1,811,132	41.578
TOTAL		**4,322,792**	**99.238**

REQUIRED MATERIALS Edit Date: 7/10/2012

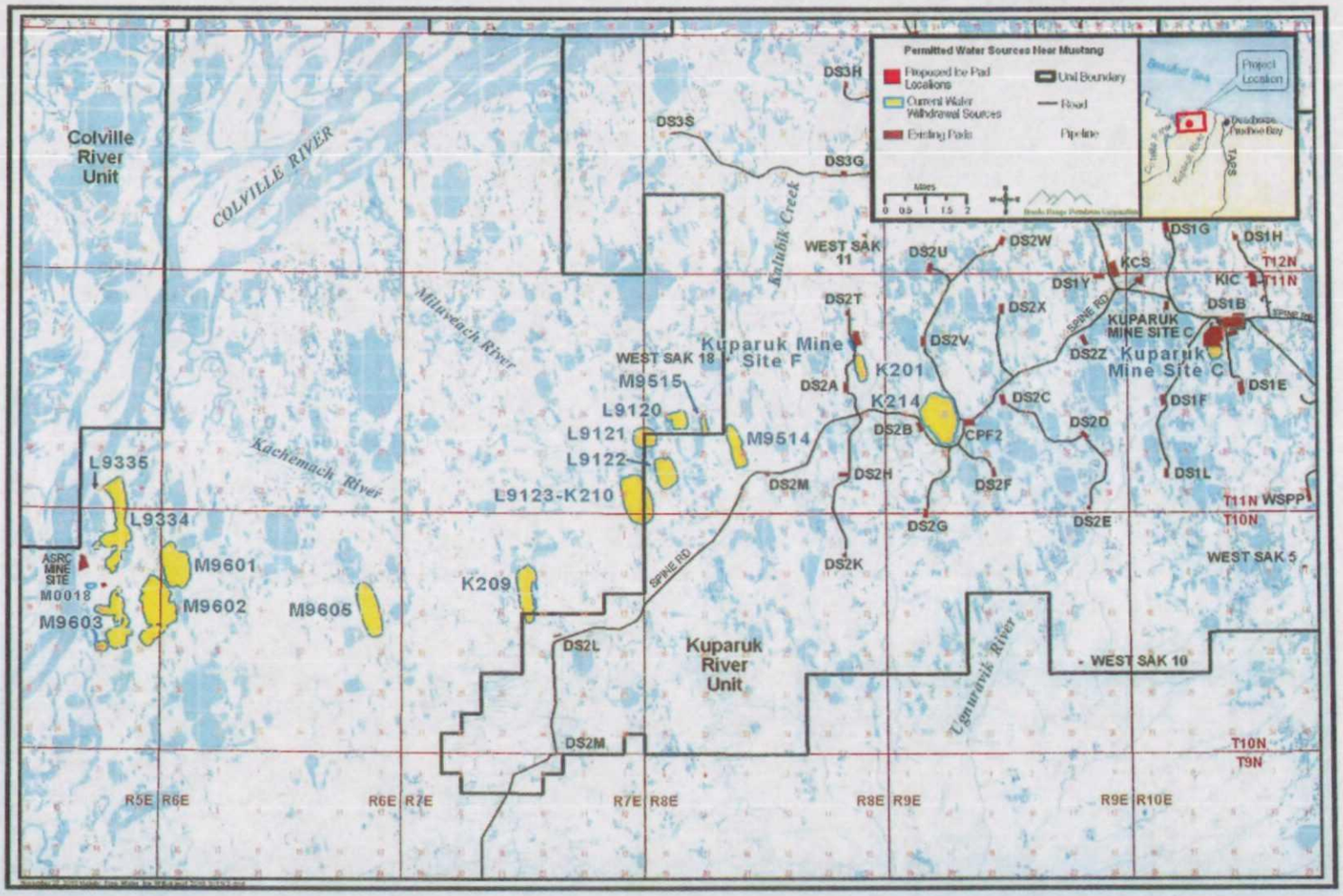
Element	Fill Volume (CY)
Access Road	207,222
Mine Road	26,477
Pad	276,750
Over Build (20%)	102,090
TOTAL Gravel Req'd	**612,539**
Mine Berm (overburden)	33,207

PHASE 1 MINE VOLUMES Edit Date: 6/21/2012

Element	Volume (CY)
Total Ex	1,280,800
Overburden	326,400
In Place Useable	954,400
Assume 25% Waste	238,600
TOTAL USEABLE	**715,800**
Mine Berm (Overburden)	18360
Rehab Material	557500

PHASE 2 MINE VOLUMES Edit Date: 6/22/2012

Element	Volume (CY)
Total Ex	384,500
Overburden	105,700
In Place Useable	278,800
Assume 25% Waste	69,700
TOTAL USEABLE	**209,100**
Mine Berm (Overburden)	11533
Rehab Material	169130.5


Permitted Water Sources Near Mustang
Proposed Ice Pad Locations
Current Water Withdrawal Sources
Existing Pads
Unit Boundary
Road
Pipeline
Project Location
Colville River Unit
COLVILLE RIVER
Miluveach River
Kachemach River
Kuhukh Creek
DS3H
DS3S
DS3G
WEST SAK 11
DS2U
DS2W
DS1G
DS1H
T12N
T11N
KIC
KCS
DS1Y
DS2T
DS2X
DS1B
KUPARUK MINE SITE C
DS2Z
Kuparuk Mine Site C
DS1E
DS1F
DS1L
T11N WSPP
T10N
WEST SAK 5
WEST SAK 10
Kuparuk Mine Site F
WEST SAK 18
M9515
L9120
L9121
L9122
L9123-K210
M9514
DS2A
K201
K214
DS2V
DS2C
DS2B
CPF2
DS2D
DS2M
DS2H
DS2F
DS2E
DS2G
DS2K
L9335
L9334
ASRC MINE SITE
M0018
M9601
M9602
M9603
M9605
K209
DS2L
SPINE RD
Kuparuk River Unit
Ugnuravik River
DS2M
T10N
T9N
R5E R6E
R6E R7E
R7E R8E
R8E R9E
R9E R10E

Alaska Department of Natural Resources
Division of Oil & Gas
550 W 7th Ave. Suite 800
Anchorage, Alaska 99501

Revised March 2012

MITIGATION MEASURE ANALYSIS: NORTH SLOPE

The following instructions are provided for guidance to adequately complete the Mitigation Measure Analysis form.

1. The applicants' response shall begin by stating one of the following: **Mitigation measure satisfied**, **A waiver is requested**, or **Mitigation measure not applicable.**

2. The applicants' response shall then address how the proposed project clearly satisfies the mitigation measure, how the proposed project meets the intent of the mitigation measure while operating with a waiver, is not practicable for the proposed project and requires a waiver to complete the proposed project, or is not applicable for the proposed project.

3. The applicant shall respond to each Mitigation Measure, and all subsets of mitigation measures; i.e. A.1.h.i., A.1.h.ii., and so forth, should be addressed individually.

4. Various Mitigation Measures require working 'in consultation with' agencies/parties other than DNR, DOG i.e. Mitigation Measure A.1.b. The applicant shall report this work by listing the agencies/parties, meeting dates and locations, and attendance roster (if available) in the 'Company Response' section of this form.

Please note that this form, along with the Plan of Operations Application form and the Plan of Operations document, must be completed before DNR, DOG will review an application.

Alaska Department of Natural Resources
Division of Oil & Gas
550 W 7th Ave. Suite 800
Anchorage, Alaska 99501

Revised March 2012

NORTH SLOPE	
A. Mitigation Measures	**Brooks Range Petroleum Corporation (BRPC) Response**
1. Facilities and Operations	
a. A plan of operations must be submitted and approved before conducting exploration, development or production activities, and must describe the lessee's efforts to minimize impacts on residential, commercial, and recreational areas, Native allotments and subsistence use areas. At the time of application, lessee must submit a copy of the proposed plan of operations to all surface owners whose property will be entered.	A.1.a. **Mitigation Measure Satisfied.** The project avoids all native allotments; as well as, residential, commercial, and recreational lands. The project area is in the Nuiqsut and Barrow community subsistence harvest areas, as indicated on the NSB's resource atlas maps. The project area is zoned as a Resource Development District by the NSB and is located adjacent to the existing oil field infrastructure including the Alpine Transportation Company Pipeline and the Kuparuk Oil Field. This area is approximately 18.5 miles northeast of Nuiqsut. Although the project is located within the Barrow and Nuiqsut Subsistence Use Areas, the project is not expected to interfere with subsistence activities. BRPC employees and contractors would follow wildlife non-interference policies as listed in the North Slope Environmental Field Handbook. These policies are designed to protect subsistence resources such as caribou. BRPC activities will not reduce subsistence resources or interfere with local residents' ability to access subsistence resources. The State of Alaska is the only surface owner whose property would be entered for construction and operation of the proposed Mustang Oil Field Development Project. A copy of the Mustang Plan of Operations is being submitted to the State of Alaska, Division of Oil & Gas along with this Mitigation Analysis.
b. Facilities must be designed and operated to minimize sight and sound impacts in areas of high residential, commercial, recreational, and subsistence use and important wildlife habitat. Methods may include providing natural buffers and screening to conceal facilities, sound insulation of facilities, or by using alternative means approved by the Director, in consultation with ADF&G and the NSB.	A.1.b. **Mitigation Measure Satisfied.** The Mustang Oil Field Project is located adjacent to existing North Slope industrial infrastructure including the Alpine Pipeline and Kuparuk Oil Field. As noted above (a.), the project is located approximately 18.5 miles northeast of Nuiqsut, the nearest community. The tallest element of the Mustang Oil Field Operation would be the drill rig, which would be initially present for 24 months, and would be approximately 150 feet above the existing ground surface. All other temporary facilities on the pad would be no greater than 40 feet above the existing ground surface. As such, no special methods are required to mitigate visual or noise impacts.

	BRPC will conduct all drilling and transportation activities to prevent impacts to subsistence activities by minimizing impacts of the project to lakes, streams, wetlands, fish and wildlife populations and their habitats.
c. To the extent practicable, the siting of facilities will be prohibited within 500 feet of all fish-bearing streams and waterbodies and 1,500 feet from all current surface drinking water sources. Additionally, to the extent practicable, the siting of facilities will be prohibited within one-half mile of the banks of the main channel of the Colville, Canning, Sagavanirktok, Kavik, Shaviovik, Kadleroshilik, Echooka, Ivishak, Kuparuk, Toolik, Anaktuvuk and Chandler Rivers. Facilities may be sited within these buffers if the lessee demonstrates to the satisfaction of the Director, in consultation with ADF&G, that site locations outside these buffers are not practicable or that a location inside the buffer is environmentally preferred. Road, utility, and pipeline crossings must be consolidated and aligned perpendicular or near perpendicular to watercourses.	A.1.c. **Mitigation Measure Satisfied.** The proposed Mustang Oil Field Development gravel pad is more than 500 feet east of the Miluveach River, the nearest fish-bearing stream to the proposed exploration pad. The Mustang Oil Field Development ice roads, ice pads, gravel pad and gravel roads will not cross any fish-bearing streams. There are no known surface drinking water sources within 1,500 feet of this location.
d. No facilities will be sited within one-half mile of identified Dolly Varden overwintering and/or spawning areas on the Canning, Shaviovik, and Kavik rivers. Notwithstanding the previous sentence, road and pipeline crossings may only be sited within these buffers if the lessee demonstrates to the satisfaction of the Director and ADF&G in the course of obtaining their respective permits, that either (1) the scientific data indicate the proposed crossing is not within an overwintering and/or spawning area; or (2) the proposed road or pipeline crossing will have no significant adverse impact to Dolly Varden overwintering and/or spawning habitat.	A.1.d. **Mitigation Measure Not Applicable.** None of the elements of the Mustang Oil Field Development Project are proximal to the Canning, Shaviovik, or Kavik Rivers.
e. Impacts to important wetlands must be minimized to the satisfaction of the Director, in consultation with ADF&G and ADEC. The Director will consider whether facilities are sited in the least sensitive areas. Further, all activities within wetlands require permission from the US Army Corps of Engineers (see Lessee Advisories).	A.1.e. **Mitigation Measure Satisfied.** To minimize impacts to wetlands during initial construction, BRPC will use ice roads to access the pad site and gravel mine site. BRPC examined two alternative configurations for the gravel roads and gravel pad associated with the Mustang Oil Field Development site and selected the alternative with the least number of acres impacted as part of the Section 404 permitting process. The gravel road where it connects to the Tarn Spine road was sited to avoid a small area of scarce and high value habitat and was sited in less valuable habitat.
f. Exploration facilities, including exploration roads and pads, must be temporary and must be constructed on ice unless the Director determines that no practicable alternative exists. Re-use of abandoned gravel structures may be permitted on a case-by-case basis by the Director, after consultation with the director, DMLW, and ADF&G. Approval for use of abandoned structures will depend on the extent and method of restoration needed to return these structures to a usable condition.	A.1.f. **Mitigation Measure Satisfied.** The Mustang Oil Field Development is not an exploration project. BRPC intends to construct ice roads and two ice pads during the construction phase of the development facilities to access the gravel mine site and sites selected for the gravel roads and pads. Aside from these temporary features, all other elements of the project will involve the construction of permanent features (gravel roads and pad).

g. Pipelines must utilize existing transportation corridors where conditions permit. Pipelines must be designed to facilitate the containment and cleanup of spilled fluids. Where practicable, onshore pipelines must be located on the upslope side of roadways and construction pads, unless the director, DMLW, determines that an alternative site is environmentally acceptable. Wherever possible, onshore pipelines must utilize existing transportation corridors and be buried where soil and geophysical conditions permit. All pipelines, including flow and gathering lines, must be designed, constructed and maintained to assure integrity against climatic conditions, geophysical hazards, corrosion and other hazards as determined on a case-by-case basis.	A.1.g. **Mitigation Measure Not Applicable.** BRPC will construct one sales crude oil pipeline and one water pipeline as part of the Mustang Oil Field Development Project. The sales crude oil pipeline, which will be 1,000 feet in length and six inches in diameter, will connect to the 14 inch, existing, Alpine Transportation Company pipeline. The 1,000 foot, 6 inch water pipeline will connect to the existing water pipeline at ConocoPhillips Alaska, Inc.'s Central Processing Facility #2 (CPF 2). Gathering lines will be constructed as well. These pipelines will be designed and maintained to assure integrity against climatic conditions, geophysical hazards, corrosion and other hazards.
h. Pipelines shall be designed and constructed to avoid significant alteration of caribou and other large ungulate movement and migration patterns. At a minimum, above-ground pipelines shall be elevated 7 feet, as measured from the ground to the bottom of the pipe, except where the pipeline intersects a road, pad, or a ramp installed to facilitate wildlife passage. Lessees shall consider increased snow depth in the sale area in relation to pipe elevation to ensure adequate clearance for wildlife. ADNR may, after consultation with ADF&G, require additional measures to mitigate impacts to wildlife movement and migration. i. The state of Alaska discourages the use of continuous-fill causeways. Environmentally preferred alternatives for field development include use of buried pipelines, onshore directional drilling, or elevated structures. Approved causeways must be designed, sited, and constructed to prevent significant changes to nearshore oceanographic circulation patterns and water quality characteristics (e.g., salinity, temperature, suspended sediments) that result in exceedances of water quality criteria, and must maintain free passage of marine and anadromous fish. ii. Causeways and docks shall not be located in river mouths or deltas. Artificial gravel islands and bottom founded structures shall not be located in river mouths or active stream channels on river deltas, except as provided for in (iii). iii. Each proposed structure will be reviewed on a case-by-case basis. Causeways, docks, artificial gravel islands and bottom founded structures may be permitted if the Director, in consultation with ADF&G, ADEC, and the NSB determines that a causeway or other structures are necessary for field development and that no practicable alternatives exist. A monitoring program may be required to address the objectives of water quality and free	A.1.h.i. **Mitigation Measure Not Applicable.** No continuous fill causeways are associated with the Mustang Oil Field Development project. A.1.h.ii. **Mitigation Measure Not Applicable.** No causeways are associated with the Mustang Oil Field Development project. A.1.h.iii. **Mitigation Measure Not Applicable.** The project does not entail the construction of any causeways, docks, artificial gravel islands, bottom founded structures, or other offshore facilities.

passage of fish, and mitigation shall be required where significant deviation from objectives occurs. (See also Lessee Advisories regarding U.S. Army Corps of Engineers requirements.)	
j. Dismantlement, Removal and Rehabilitation (DR&R): Upon abandonment of material sites, drilling sites, roads, buildings or other facilities, such facilities must be removed and the site rehabilitated to the satisfaction of the Director, unless the Director, in consultation with DMLW, ADF&G, ADEC, NSB, and any non-state surface owner, determines that such removal and rehabilitation is not in the state's interest.	A.1.j. **Mitigation Measure Satisfied.** The temporary ice pads associated with the Mustang Oil Field Development project will be cleared of equipment, ice surfaces will be cleaned, and the area cleaned of any debris. Equipment and supplies will be removed. A gravel mine rehabilitation and reclamation plan has been written to address how BRPC will abandon the material site. See Plan of Operations for abandonment details for the Mustang Oil Field
k. Gravel mining sites required for exploration and development activities will be restricted to the minimum necessary to develop the field efficiently and with minimal environmental damage. Where practicable, gravel sites must be designed and constructed to function as water reservoirs for future use. Gravel mine sites required for exploration activities must not be located within an active floodplain of a watercourse unless the director, DMLW, after consultation with ADF&G, determines that there is no practicable alternative, or that a floodplain site would enhance fish and wildlife habitat after mining operations are completed and the site is closed. Mine site development and rehabilitation within floodplains must follow the procedures outlined in McLean, R. F. 1993, North Slope Gravel Pit Performance Guidelines, ADF&G Habitat and Restoration Division Technical Report 93-9, available from ADF&G.	A.1.k. **Mitigation Measure Satisfied. The** Mustang Oil Field Development project will involve a material sale and the development of a new gravel mine site. The gravel mine site has been sized appropriate to the material requirements for initial construction and maintenance of the facility over the next 20 years. BRPC has proposed converting the mine to wildlife habitat upon mine closure. A brief description of the plan is provided in the Plan of Operations. The complete rehabilitation and reclamation plan is available as part of the material sale contract.
2. Fish and Wildlife Habitat	
a. Detonation of explosives within or in proximity to fish-bearing waters must not produce instantaneous pressure changes that exceed 2.7 pounds per square inch in the swim bladder of a fish. Detonation of explosives within or in close proximity to a fish spawning bed during the early stages of egg incubation must not produce a peak particle velocity greater than 0.5 inches per second. Blasting criteria have been developed by ADF&G and are available upon request from ADF&G. The location of known fish-bearing waters within the project area can also be obtained from ADF&G. The lessee will consult with the NSB prior to proposing the use of explosives for seismic surveys. The Director may approve the use of explosives for seismic surveys after consultation with the NSB.	A.2.a. **Mitigation Measure Satisfied.** Blasting will be used for developing the gravel mine site in accordance with a blasting and explosives plan. BRPC will ensure that the appropriate buffer zones are implemented to ensure fish species are not negative affected by blasting activities.
b. Water intake pipes used to remove water from fish-bearing waterbodies must be surrounded by a screened enclosure to prevent fish entrainment and	A.2.b. **Mitigation Measure Satisfied.** BRPC has two existing Temporary Water Use Permits (TWUP A2012-138 and A2012-139) for the general Mustang Oil

impingement. Screen mesh size shall be no greater than 1 mm (0.04 inches), unless another size has been approved by ADF&G. The maximum water velocity at the surface of the screen enclosure may be no greater than 0.1 foot per second, unless an alternative velocity has been approved by ADF&G.	Field Development vicinity. Several of these lakes have been identified as fish-bearing waters and BRPC has been granted Fish Habitat Permits (FHPs) for the applicable lakes by the ADF&G. The withdrawal of water from these fish bearing water bodies would be undertaken in accordance with existing permits. BRPC will comply with all applicable permit conditions and stipulations, including the following: • BRPC shall provide water intake screen specifications and maximum pumping rates to the ADF&G for approval prior to water withdrawal. Alternatively, if a previously approved intake structure is to be used for this project, BRPC may provide the ADF&G with a copy of the ADF&G certification letter for that intake structure. • Water pump intakes screens and water velocity at intake structure will be approved by ADFG and in accordance with ADFG requirements. BRPC has received approval in the past by ADFG for a 0.25 screen mesh size and 0.5 feet per second water velocity intake. BRPC will request approval again for this season. This screen mesh size and velocity intake is appropriate for North Slope activities and is commonly used by oil field support services for ice road and pad construction. • BRPC shall inspect the intake screen for damage (torn screen, crushed screen, screen separated from intake ends, etc.) after each use and prior to each deployment. Any damage observed must be repaired prior to use of the structure. The structure must conform to the original design specifications while in use. • Any water intake structure in fish bearing waters, including a screened enclosure, well points, sumps, or infiltration galleries must be designed, operated, and maintained to prevent fish entrapment, entrainment, or injury, unless specifically exempted by ADF&G. • Each water intake directly accessible by fish shall be designed to prevent intake, impingement, or entrapment of fish. The suction hose at the water extraction site must be clean and free from contamination at all times to prevent introduction of contamination to the water bodies, and should be in water of a sufficient depth so that the stream sediments are not disturbed during the extraction process.
c. Removal of snow from fish-bearing rivers, streams and natural lakes shall be subject to prior written approval by ADF&G. Compaction of snow cover overlying fish-bearing waterbodies is prohibited except for approved crossings. If ice thickness is not sufficient to facilitate a crossing, ice or snow bridges may	A.2.c. **Mitigation Measure Satisfied.** BRPC has applied for FHPs to authorize water withdrawals from fishbearing waterbodies. BRPC acknowledges this mitigation measure and will comply with this condition regarding the removal of snow from fish-bearing waters.

be required.	
d. Bears: i. Before commencement of any activities, lessees shall consult with ADF&G (907-459-7213) to identify the locations of known brown bear den sites that are occupied in the season of proposed activities. Exploration and production activities must not be conducted within one-half mile of occupied brown bear dens, unless alternative mitigation measures are approved by ADF&G. A lessee who encounters an occupied brown bear den not previously identified by ADF&G must report it to the Division of Wildlife Conservation, ADF&G, within 24 hours. Mobile activities shall avoid such discovered occupied dens by one-half mile unless alternative mitigation measures are approved by the Director, with concurrence from ADF&G. Non-mobile facilities will not be required to relocate. ii. Before commencement of any activities, lessees shall consult with the USFWS (907-786-3800) to identify the locations of known polar bear den sites. Operations must avoid known polar bear dens by 1 mile. A lessee who encounters an occupied polar bear den not previously identified by USFWS must report it to the USFWS within 24 hours and subsequently avoid the new den by 1 mile. If a polar bear should den within an existing development, off-site activities shall be restricted to minimize disturbance. iii. For projects in proximity to areas frequented by bears, lessees are required to prepare and implement a human-bear interaction plan designed to minimize conflicts between bears and humans. The plan should include measures to: A. minimize attraction of bears to facility sites; B. organize layout of buildings and work areas to minimize interactions between humans and bears; C. warn personnel of bears near or on facilities and the proper actions to take; D. if authorized, deter bears from the drill site; E. provide contingencies in the event bears do not leave the site; F. discuss proper storage and disposal of materials that may be toxic to bears; and G. provide a systematic record of bears on the site and in the immediate area.	BRPC will consult with the ADF&G to determine the locations of known brown bear dens prior to start of the proposed activities and, unless the ADF&G approves alternative mitigation measures, BRPC will avoid mobile activities within 0.5 mile of occupied brown bear dens, including those potentially encountered but not previously identified. Occupied dens detected by BRPC will be reported to ADF&G. A.2.d.ii. **Mitigation Measure Satisfied.** BRPC acknowledges and will comply with all aspects of this measure. BRPC will consult with the USFWS to determine the locations of known polar bear dens before commencing any activities. If an occupied den is detected by BRPC during its operations it will be reported to the USFWS. Operations will not be conducted by BRPC within one mile of occupied polar bear dens without alternative mitigation measures approved by the USFWS. A.2.d.iii. **Mitigation Measure Satisfied.** BRPC has developed and will implement a Polar Bear Interaction Plan, in consultation with the USFWS, for compliance with the Marine Mammal Protection Act and the Endangered Species Act. This plan is designed to minimize the potential for human-bear interaction by managing both the site and personnel. It includes specific measures pertaining to site layout, snow management, garbage control, waste management, material storage, lighting, and personnel. As part of the environmental training program, all personnel will be instructed not to disturb or feed any wildlife. BRPC will request a Letter of Authorization and Incidental Harassment Authorization from the USFWS for the Mustang Oil Field Development project.
e. Permanent, staffed facilities must be sited to the extent practicable outside identified brant, white-fronted goose, snow goose, tundra swan, king eider,	A.2.e. **Mitigation Measure Satisfied.** The Mustang Development Project will include permanent, staffed facilities located on the proposed production pad.

common eider, Steller's eider, spectacled eider, and yellow-billed loon nesting and brood rearing areas.	The project has been designed to develop the known oil reserves with the smallest footprint possible. The facilities have been sited to avoid direct impacts to waterfowl nesting and brood rearing habitats. This was accomplished by examining the vegetation and wetland types that typically support these birds and then designing the road and production pad to avoid these habitats as much as possible. For example there are several wetland complexes (areas of abundant small lakes and ponds) that were avoided by the current road design. In addition the design of the production pad was also altered to avoid a large lake preserving this potential waterfowl habitat. Most brant, and snow geese nest in colonies much closer to the coast including the highly utilized areas of the Colville and Sagavanirktok River deltas. Common eiders preferred nesting locations are the barrier islands, with the nests often built adjacent to piles of driftwood. The project should not have an effect on the nesting and rearing habitats of these birds because the project is too far inland. Tundra swans are also common nesters near river deltas along the coast with the highest nesting density numbers recorded near the Colville and Sagavanirktok River deltas. However, nesting surveys have located swan nests throughout the coastal plain area including close to the project area. As noted above the road and production pad have avoided nesting and rearing habitats including those for swans. White fronted geese and king eiders nest throughout the coastal plain. Preferred nesting habitat is on the tundra close to a water body with the broods moving to water immediately after hatching. By designing the road route to avoid the wetland complexes as noted above, the project has avoided nesting and rearing habitats. Yellow billed loons preferred nesting and brood rearing habitat consists of large clear lakes greater than 6 feet in depth (2 meters) with an abundant fish population. Further the lakes are usually connected to a fish bearing stream, have low-lying shorelines, are vegetated and convoluted in shape. Breeding yellow billed loons are generally found in concentrated nesting areas with the largest concentration area between the Meade and Ikpikpuk Rivers well west of the project area. There are only three lakes that could support yellow billed loons near the project. All of these are along the road route and all are at least .25 miles from the road. Again the road route has minimized and avoided the nesting and brood rearing habitat of these birds. Because of the special status of spectacled and Steller's eiders we offer the following information from the US Fish and Wildlife Service (USFWS) Biological

	Opinion (BO) for the project. *"In Alaska, Steller's eiders breed almost exclusively on the Arctic Coastal Plain (ACP), migrating to the breeding grounds in late spring and remaining in the region as late as mid-October. However, nesting is concentrated in tundra wetlands near Barrow, Alaska and Steller's eiders occur at very low densities elsewhere on the ACP (Larned et al. 2010). USFWS aerial surveys for breeding eiders conducted annually on the ACP from 1992–2010 reported only 5 observations of Steller's eiders east of the Colville River, with the most recent observation in 1998 (USFWS Alaska Region Migratory Bird Management, unpublished data). Because available data indicate Steller's eiders are unlikely to nest near or migrate through the project area, we conclude that adverse effects will be discountable and that the proposed action is not likely to adversely affect Alaska-breeding Steller's eiders."* Based on this information the project will not affect Steller's eiders nesting or brood rearing areas. Spectacled eider habitat lies further to the east and is in the vicinity of the project. The USFWS concluded in their BO that spectacled eiders could be effected by collisions with structures, increased predator populations, oil spills and long term habitat loss. They conclude that adverse effects from collisions with structures, increased predators and oil spills are unlikely to occur. However, there is concern that long-term habitat loss could occur. In a conservative evaluation the USFWS concluded: *"To summarize, we estimate that the proposed action will result in the loss of 12 eggs over an assumed 16-year project life through direct loss of breeding habitat and disturbance within a 200-m zone of influence surrounding the project infrastructure within the action area. These estimates are based on a series of conservative assumptions and represent estimated maximum potential impact to spectacled eiders."* The USFWS goes on to state that the project "*may adversely effect, but is not likely to jeopardize the continued existence of spectacled eiders*". Based on these conclusions BRPC believes it has done all practically possible to minimize and avoid the bird habitats of concern within the project area.
3. Subsistence, Commercial and Sport Harvest Activities	
a. i. Exploration, development and production operations shall be conducted in a manner that prevents unreasonable conflicts between lease-related activities	A.3.a.i. **Mitigation Measure Satisfied.** In an effort to cooperate with affected subsistence communities, BRPC has consulted with the North Slope Borough (NSB) Planning Commission and representatives of the Inupiat Community of the Arctic Slope (ICAS), Ukpeagvik Inupiat Corporation (UIC), the Eskimo

and subsistence activities. Lease-related use will be restricted when the Director determines it is necessary to prevent conflicts with local subsistence, commercial and sport harvest activities. In enforcing this term DO&G will consult with other agencies, the affected local borough(s) and the public to identify and avoid potential conflicts that are brought to the division's attention both in the planning and operational phases of lease-related activities. In order to avoid conflicts with subsistence, commercial and sport harvest activities, restrictions may include alternative site selection, requiring directional drilling, seasonal drilling restrictions, and other technologies deemed appropriate by the Director. ii. Prior to submitting a plan of operations for either onshore or offshore activities which have the potential to disrupt subsistence activities, the lessee shall consult with the potentially affected subsistence communities and the NSB (collectively "parties") to discuss the siting, timing, and methods of proposed operations and safeguards or mitigating measures which could be implemented by the operator to prevent unreasonable conflicts. The parties shall also discuss the reasonably foreseeable effect on subsistence activities of any other operations in the area that they know will occur during the lessee's proposed operations. Through this consultation, the lessee shall make reasonable efforts to assure that exploration, development, and production activities are compatible with subsistence hunting and fishing activities and will not result in unreasonable interference with subsistence harvests. iii. A discussion of agreements reached or not reached during the consultation process and any plans for continued consultation shall be included in the plan of operations. The lessee shall identify who participated in the consultation and send copies of the plan to participating communities and the NSB when it is submitted to the division. iv. If the parties cannot agree, then any of them may request the Commissioner of DNR or his/her designee to intercede. The commissioner may assemble the parties or take other measures to resolve conflicts among the parties. v. The lessee shall notify the Director of all concerns expressed by subsistence hunters during operations and of steps taken to address such concerns.	Whaling Commission (EWC), Kuukpik Corporation, the Kuukpik Subsistence Oversight Panel (KSOP), the Native Village of Nuiqsut, and the City of Nuiqsut regarding its exploration efforts in past years and plans continued consultation for the Mustang Development Project. A.3.a.ii. **Mitigation Measure Satisfied.** In an effort to keep these organizations updated and involved, BRPC has provided their Mustang Oil Field Development Plan of Operations to the ICAS, KSOP, EWC, Native Village of Nuiqsut, and the City of Nuiqsut. BRPC has met with the following groups to discuss its plans for the development: 07/30/12 – Met with Kuukpik management in Anchorage 10/3/12 – Met with NSB Planning Department in Anchorage 10/25/12 – Presented to the NSB Planning Commission in Barrow 11/23/12 – Met with the Native Village of Nuiqsut in Nuiqsut 11/26/12 – Met with the Kuukpik Subsistance Oversight Panel in Nuiqsut 11/27/12 – Held a community meeting in the Nuiqsut Community Center 12/4/12 – Presented to the NSB Assembly in Barrow A.3.a.iii. **Mitigation Not Applicable.** The Mustang Oil Field Development project occurs on State lands only. A.3.a.iv. **Mitigation Measure Addressed.** BRPC has met with subsistence users in Nuiqsut on November 26, 2012. There were no concerns raised for which agreement cannot be reached. If any concerns are raised going forward, BRPC will notify ADNR at that time. A.3.a.v. **Mitigation Measure Addressed.** No concerns have been raised for which agreement cannot be reached. If any concerns are raised going forward, BRPC will notify ADNR at that time. BRPC will comply with these requirements to the extent applicable.
b. Traditional and customary access to subsistence areas shall be maintained unless reasonable alternative access is provided to subsistence users. "Reasonable access" is access using means generally available to subsistence users. Lessees will consult the NSB, nearby communities, and native	A.3.b. **Mitigation Measure Satisfied.** BRPC will ensure access for subsistence activities in the Mustang Oil Field Development project area. However, access to the mine site, gravel pad; as well as, the rig or rig facilities will be restricted to authorized persons and regulatory personnel for proprietary

organizations for assistance in identifying and contacting local subsistence users.	and safety reasons. BRPC will not deny access or assistance to hunters or travelers in distress.
4. Fuel, Hazardous Substances and Waste	
a. Secondary containment shall be provided for the storage of fuel or hazardous substances.	A.4.a. **Mitigation Measure Satisfied.** Fuel transportation, storage, and use will be in accordance with BRPC's Oil Discharge Prevention and Contingency Plan for the Mustang Oil Field; as well as, NSB, ADNR, and ADEC requirements. Fuel will be stored on the drilling pad, at emergency shelters, and water source pumps. The gravel pad and gravel roads would be greater than 500 feet from the nearest surface water body. The Mustang Oil Field Development gravel pad and gravel roads would be greater than 1,500 feet of any surface drinking water source. BRPC and its contractors will provide oversight and tracking of the fuel and chemicals. Secondary containment for fuel storage tanks will be a minimum of 110% of the single largest tank or any group of tanks permanently manifolded together. Fuel flow diagrams, fuel transfer procedures, valving details and safety precautions for the drilling rig are listed in the drilling contractors' Spill Prevention, Control, and Countermeasures (SPCC) Plan. When fuel is stored for less than seven days, as during mobilization and demobilization or other off-pad activities of short duration, BRPC will use ADEC approved best management practices. Fuel will not be stored on lake or river ice. Small day tanks, approximately 100 gallons in size, will be located at or near water source pumps and refilled periodically. Fuel trucks will travel to the drill site via existing gravel roads and the ice road system.
b. Containers with an aggregate storage capacity of greater than 55 gallons which contain fuel or hazardous substances shall not be stored within 100 feet of a waterbody, or within 1,500 feet of a current surface drinking water source.	A.4.b. **Mitigation Measure Satisfied.** Containers storing hazardous substances will not be stored within 100 feet of a water body nor within 1,500 feet of a current surface drinking water source.
c. During equipment storage or maintenance, the site shall be protected from leaking or dripping fuel and hazardous substances by the placement of drip pans or other surface liners designed to catch and hold fluids under the equipment, or by creating an area for storage or maintenance using an impermeable liner or other suitable containment mechanism.	A.4.c. **Mitigation Measure Satisfied.** Drip pans and other surface liners designed to catch and hold fluids in equipment will be used to prevent spills from occurring within the Mustang Oil Field Development project area.
d. During fuel or hazardous substance transfer, secondary containment or a surface liner must be placed under all container or vehicle fuel tank inlet and outlet points, hose connections, and hose ends. Appropriate spill response	A.4.d. **Mitigation Measure Satisfied.** Surface liners will be placed under all containers or vehicle fuel tank inlet and outlet points, hose connections, and hose ends during refueling. The Oil Discharge Prevention and Contingency

equipment, sufficient to respond to a spill of up to five gallons, must be on hand during any transfer or handling of fuel or hazardous substances. Trained personnel shall attend transfer operations at all times.	Plan (C-Plan) is being updated in accordance with ADEC regulations to cover drilling activities. BRPC will also rely on its contractors' spill prevention, control and countermeasures (SPCC) plan for the drilling component of the Mustang Oil Field Development project. These documents will cover spill prevention, detection, and response. Furthermore, BRPC is a member of Alaska Clean Seas (ACS), which will provide rapid spill response via the Spine Road system to any incident at the Mustang Oil Field Development project area.
e. Vehicle refueling shall not occur within the annual floodplain, except as addressed and approved in the plan of operations. This measure does not apply to water-borne vessels.	A.4.e. **Mitigation Measure Satisfied.** Vehicle refueling will not occur within the annual floodplain of the Mustang Oil Field Development project area.
f. All independent fuel and hazardous substance containers shall be marked with the contents and the lessee's or contractor's name using paint or a permanent label.	A.4.f. **Mitigation Measure Satisfied.** Fuel and hazardous substance containers shall be marked with contents and the lessee's or contractors name on it.
g. A fresh water aquifer monitoring well, and quarterly water quality monitoring, is required down gradient of a permanent storage facility, unless alternative acceptable technology is approved by ADEC.	A.4.g. **Mitigation Measure Satisfied.** All tankage installed as permanent operations will be in tank farms with sealed impermeable liners and will be frequently monitored during operations in accordance with BRPC's C-Plan. BRPC will install in accordance with ADEC and ADNR regulations and appropriate industry standards (ex., 18 AAC 75, API 650, etc.).
h. Waste from operations must be reduced, reused, or recycled to the maximum extent practicable. Garbage and domestic combustibles must be incinerated whenever possible or disposed of at an approved site in accordance with 18 AAC 60. (See Lessee Advisories, ADEC.)	A.4.h. **Mitigation Measure Satisfied.** The waste management strategy developed for the Mustang Oil Field Development project consists of waste minimization to the greatest extent possible, with re-use and recycling incorporated where practical. Waste generated during drilling operations will be handled according to procedures found in the Alaska Waste Disposal and Reuse Guide (Revision 7, October 2005), also known as the "Red Book." This guide is periodically updated as needed to conform to new regulatory requirements, standard operating procedures, or changes in facilities or operations.
i. New solid waste disposal sites, other than for drilling waste, will not be approved or located on state property during the exploration phase of lease activities. Disposal sites may be provided for drilling waste if the facility complies with 18 AAC 60. (See Lessee Advisories, ADEC.)	A.4.i. **Mitigation Not Applicable.** There will be no new solid waste disposal sites proposed as part of the Mustang Oil Field Development project. Solid waste will be hauled off site to the appropriate, existing waste disposal site for which arrangements have been made prior to the exploration season.
j. The preferred method for disposal of muds and cuttings from oil and gas activities is by underground injection. Drilling mud and cuttings cannot be discharged into lakes, streams, rivers, or important wetlands. On pad temporary cuttings storage will be allowed as necessary to facilitate annular injection and/or backhaul operations. Impermeable lining and diking, or equivalent measures, will be required for reserve pits. Surface discharge of drilling muds	A.4.j. **Mitigation Measure Satisfied.** Drilling wastes will be managed by a combination of methods including transport and injection into approved Class II Disposal wells at other North Slope locations. A Class II injection well is also planned for the Mustang Development Project. All waste disposal procedures will conform to local, state, and federal

and cuttings into reserve pits shall be allowed only when the Director, in consultation with ADF&G, determines that alternative disposal methods are not practicable. Injection of non-hazardous oilfield wastes is regulated by AOGCC through its Underground Injection Control (UIC) Program for oil and gas wells. See also Mitigation Measure 8.a.vi.	regulations. See Mustang Development Plan of Operations for additional information on waste disposal procedures.
k. Proper disposal of garbage and putrescible waste is essential to minimize attraction of wildlife. The lessee must use the most appropriate and efficient method to achieve this goal. The primary method of garbage and putrescible waste is prompt, on-site incineration in compliance with state of Alaska air quality regulations. The secondary method of disposal is on-site frozen storage in animal-proof containers with backhaul to an approved waste disposal facility. The tertiary method of disposal is on-site non-frozen storage in animal proof containers with backhaul to an approved waste disposal facility. Daily backhauling of non-frozen waste must be achieved unless safety considerations prevent it.	A.4.k. **Mitigation Measure Satisfied.** BRPC proposes to dispose of refuse and other wastes as outlined in the Mustang Development Plan of Operations. Removing attractants minimizes the attraction of wildlife to the project location. The Site-Specific Polar Bear Interaction Plan for the Mustang Oil Field outlines BRPC's policies regarding food and other waste management. Components of this plan include: segregating food and other wastes; prohibiting employees from leaving food in unoccupied vehicles or other unsecured areas; and the use animal-proof containers for temporary storage of garbage and putrescible waste prior to hauling it offsite to an approved facilities for disposal.
5. Access	
a. Except for approved off-road travel, exploration activities must be supported only by ice roads, winter trails, existing road systems or air service. Wintertime off-road travel across tundra and wetlands may be approved in areas where snow and frost depths are sufficient to protect the ground surface. Summertime off-road travel across tundra and wetlands may be authorized subject to time periods and vehicle types approved by DMLW. Exceptions may be granted by the director of the DMLW, and the Director, if an emergency condition exists; or, if it is determined, after consulting with ADF&G that travel can be accomplished without damaging vegetation or the ground surface. Exceptions, including the use of gravel, may also be granted on a site specific basis, if it is determined, after consulting with ADF&G and DMLW, that no practicable alternatives exist for constructing an exploration road or pad in the area south of the boundary described below: Beginning at the NPR-A boundary, from the northeast corner of T 1N, R 2E, • east to the northwest corner of T 1N, R 9E, then • north to the northwest corner of T 4N, R 9E, then • east to the northwest corner of T 4N, R 23E, then • south to the southwest corner of T 4N, R 23E, and then • east along the top of T 3N to the ANWR boundary.	A.5.a. **Mitigation Measure Satisfied.** For the Mustang Oil Field Development project, BRPC proposes to build, use, and maintain a winter ice road system on state-owned lands until a permanent gravel road is completed. The ice road generally will be 35-feet wide and 6-inches thick. BRPC proposes to pre-pack the ice road alignments with approved tundra travel vehicles, in order to obtain a site-specific early opening tundra travel approval. These vehicles may include: Tundra Cat Ford pickup modified with 66" x 44" tires, Tucker SnoCat; and/or TV-145 pumper with 60-inch-wide baby rolligon tires. Additional details regarding the construction of the ice roads and ice pads that will be constructed during the construction phase of the project can be found in the Mustang Development Plan of Operations. In addition, the Mustang Development Plan of Operations provides details regarding how the gravel mine, gravel roads, and gravel pad will be constructed and maintained.

b. Public access to, or use of, the lease area may not be restricted except within the immediate vicinity of drill sites, buildings, and other related facilities. Areas of restricted access must be identified in the plan of operations. Lease facilities and operations shall not be located so as to block access to or along navigable or public waters as defined in AS 38.05.	A.5.b. **Mitigation Measure Satisfied.** BRPC will ensure access to the Mustang Oil Field Development project area for subsistence uses. However, access to the rig or rig facilities will be restricted to authorized persons and regulatory personnel for proprietary and safety reasons.
6. Prehistoric, Historic, and Archeological Sites	
a. Prior to the construction or placement of any structure, road, or facility resulting from exploration, development, or production activities, the lessee must conduct an inventory of prehistoric, historic, and archeological sites within the area affected by an activity. The inventory must include consideration of literature provided by the NSB, nearby communities, Native organizations, and local residents; documentation of oral history regarding prehistoric and historic uses of such sites; evidence of consultation with the Alaska Heritage Resources Survey and the National Register of Historic Places; and site surveys. The inventory must also include a detailed analysis of the effects that might result from the activity.	A.6.a. **Mitigation Measure Satisfied.** The locations of the proposed gravel mine, gravel pad, gravel roads; as well as, the temporary ice road and ice pad avoid known archaeological, cultural, and traditional land use sites. A site clearance investigation study was conducted during August 2012. The locations of the temporary and permanent structures were evaluated for the presence of cultural resources, and none were identified that may potentially be impacted by the proposed development activities.
b. The inventory of prehistoric, historic, and archeological sites must be submitted to the Director, and to SHPO who will coordinate with the NSB for review and comment. If a prehistoric, historic, or archeological site or area could be adversely affected by a lease activity, the Director, after consultation with SHPO and the NSB, will direct the lessee as to the course of action to take to avoid or minimize adverse effects.	A.6.b. **Mitigation Measure Satisfied.** Dr. Reanier's findings were submitted to the State Historic Preservation Officer (SHPO) on October 10, 2012 for concurrence. SHPO concurred and provided a letter of No Historic Properties Affected. SHPO concurred with the findings on October 19, 2012. A copy of the findings report and SHPO letter will be included with the Iñupiat History, Language, and Cultural (IHLC) clearance application that will be submitted to the NSB. The IHLC application will include a completed IHLC Form 500, cover letter, the SHPO concurrence letter, and a copy of Dr. Reanier's findings.
c. If a site, structure, or object of prehistoric, historic, or archaeological significance is discovered during lease operations, the lessee must report the discovery to the Director as soon as possible. The lessee must make reasonable efforts to preserve and protect the discovered site, structure, or object from damage until the Director, after consultation with the SHPO and the NSB, has directed the lessee as to the course of action to take for its preservation.	A.6.c. **Mitigation Measure Satisfied.** If any object of prehistoric, historic or archaeological significance is discovered, notifications will be made immediately to SHPO and every effort will be taken to protect the site from damage. BRPC is committed to protecting cultural resources in the area and will adhere to any and all regulations concerning known and newly discovered such resources. In accordance with Federal and State regulations, and NSB cultural resource management policies and codes, any cultural or paleontological resource discovered will not be disturbed and the NSB Inupiat History, Language and Culture (IHLC) Commission will be promptly notified.
7. Local Hire, Communication, and Training	
a. Lessees are encouraged to employ local and Alaska residents and contractors, to the extent they are available and qualified, for work performed in the lease area. Lessees shall submit, as part of the plan of operations, a	A.7.a. **Mitigation Measure Satisfied.** BRPC is committed to hire local workers on the North Slope and within Alaska to the extent possible. The Mustang Oil Field Development project will maximize local contract opportunities. Contract

proposal detailing the means by which the lessee will comply with the measure. The proposal must include a description of the operator's plans for partnering with local communities to recruit, hire and train local and Alaska residents and contractors. The lessee is encouraged, in formulating this proposal, to *coordinate with employment and training services offered by the State of Alaska* and local communities to train and recruit employees from local communities.	provisions will encourage local hire by contractors within the limits of the law. These commitments and BRPC's past record regarding local hire and contracting are documented in the Economic Opportunity Plan (EOP) for the Mustang Oil Field Development project.
b. A plan of operations application must describe the lessee's past and prospective efforts to communicate with local communities and interested local community groups.	A.7.b. **Mitigation Measure Satisfied.** BRPC has consulted with the NSB Planning Commission, Inupiat Community of the Arctic Slope (ICAS), Ukpeagvik Inupiat Corporation (UIC), the Eskimo Whaling Commission (EWC), Kuukpik Corporation, the Kuukpik Subsistence Oversight Panel (KSOP), the Native Village of Nuiqsut, and the City of Nuiqsut regarding its exploration efforts in past years. In an effort to keep these organizations updated and involved, BRPC has provided their Mustang Oil Field Development project plan to the ICAS, KSOP, EWC, Native Village of Nuiqsut, and the City of Nuiqsut. BRPC has proposed a tentative village meeting in Nuiqsut on November 13, 2012.
c. A plan of operations application must include a training program for all personnel including contractors and subcontractors. The program must be designed to inform each person working on the project of environmental, social, and cultural concerns that relate to that person's job. The program must use methods to ensure that personnel understand and use techniques necessary to preserve geological, archeological, and biological resources. In addition, the program must be designed to help personnel increase their sensitivity and understanding of community values, customs, and lifestyles in areas where they will be operating.	A.7.c. **Mitigation Measure Satisfied.** BRPC requires all North Slope employees and contractors to complete an 8-hour unescorted training program provided by the NSTC. All trainees receive a Field Environmental Handbook and the Alaska Safety Handbook. This course provides the North Slope standard introduction to personal protective equipment, camps and safety orientation, hazard communication, basic awareness HAZWOPER Level 1 training, and Environmental Excellence. The program includes an explanation of the applicable laws protecting cultural and historic resources, and stresses the importance of not disturbing archeological, cultural and historic resources while providing guidance on how to avoid disturbance. BRPC and all contractor and subcontractor personnel will receive a Health, Safety and Environmental orientation. The training program will be designed to inform each individual the environmental, social and cultural concerns that relate to their job functions. Training components will include permit stipulations and requirements, cultural awareness, spill prevention and reporting, wildlife interaction, site safety, etc. All personnel will participate in a specific training program for polar bear safety and a briefing of a site specific Polar Bear Interaction Plan. Federal Occupational Safety and Health Administration (OSHA) regulations and

	guidance provide training standards for individual positions. Training for individual positions vary with the activities performed. Individual training may include an electrical safety program; emergency preparedness and action plans; hazards communication program; HAZWOPER (levels 3-5); lockout/tag-out procedures for control of hazardous energy; emergency shutdown systems; cranes, chain hose, and sling/rope inspection program; drilling and work-over operations; machinery guarding; tank/vessel cleaning procedures; confined space entry program; first aid material and training; eye and face protection; hearing conservation program; personnel protective equipment; respiratory protection program; safety and environmental meetings.
8. Definitions	
i. "Facilities" means any structure, equipment, or improvement to the surface, whether temporary or permanent, including, but not limited to, roads, pads, pits, pipelines, power lines, generators, utilities, airstrips, wells, compressors, drill rigs, camps and buildings; ii. "Important wetlands" means those wetlands that are of high value to fish, waterfowl, and shorebirds because of their unique characteristics or scarcity in the region or that have been determined to function at a high level using the hydrogeomorphic approach; iii. "Minimize" means to reduce adverse impacts to the smallest amount, extent, duration, size, or degree reasonable in light of the environmental, social, or economic costs of further reduction; iv. "Plan of operations" means a lease Plan of operations under 11 AAC 83.158 and a unit Plan of operations under 11 AAC 83.346; v. "Practicable" means feasible in light of overall project purposes after considering cost, existing technology, and logistics of compliance with the standard; vi. "Secondary containment" means an impermeable diked area or portable *impermeable containment structure capable of containing 110 percent of the* volume of the largest independent container plus 12 inches of freeboard. Double walled tanks do not qualify as Secondary Containment unless an exception is granted for a particular tank. vii. "Temporary" means no more than 12 months.	**Mitigation Measure Satisfied.** Definitions Noted.

Alaska Department of Natural Resources
Division of Oil & Gas
550 W 7th Ave. Suite 800
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Revised March 2012

ConocoPhillips

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November 6, 2012

RECEIVED
DEC 19 2012
DIVISION OF
OIL AND GAS

Thomas Habermann
Controller
Brooks Range Petroleum Corporation
510 L Street, Suite 601
Anchorage, Alaska 99501

Re: 2012 – 2013 Winter Activity Letter of Non-Objection

Dear Mr. Habermann:

ConocoPhillips Alaska, Inc. ("CPAI"), as Operator of the Kuparuk River Unit ("KRU"), has received Brooks Range Petroleum Corporation's ("BRPC") October 29, 2012 request for a letter of non-objection related to its 2012 – 2013 winter season activities taking place within the KRU that support development of the Mustang project in the Southern Miluveach Unit. These activities include:

- construction of an ice road crossing the western portion of the KRU from a location southwest of KRU Drill Site 2M to the Mustang Pad;
- construction of a staging pad just off the ice road's junction with the KRU road system; and
- construction of a gravel road parallel and adjacent to the planned ice road to the Mustang Pad.

CPAI does not object to the proposed activities within the KRU, subject to BRPC and its contractors' compliance with the following conditions:

– Access to and use of the ice road and staging pad by BRPC and its contractors must not interfere with any KRU activity or operation.

– BRPC remains committed to the terms and conditions of its KRU Infrastructure Ad Hoc Use Agreement (commonly known as the Ballot 260 Contract) in effect between BRPC and CPAI as of January 1, 2010. BRPC's activities under this letter of non-objection will be governed by the Ballot 260 Contract; including, without limitation, the indemnity obligations and the specific conditions and rules governing access and travel within the KRU.

– BRPC shall obtain all necessary permits and approvals from federal, state and local governments, agencies, landowners and leaseholders, as appropriate, prior to commencing any activities that are the subject of this letter.

– BRPC shall report all spills or discharges that occur on roads maintained by the KRU to KRU Security and to the applicable state or federal agency as required by any law, regulation, or permit, and must properly contain, clean up, remove, and remediate all spills or discharges at its own expense.

- BRPC arranges and holds a kickoff meeting with the KRU Sim Ops Planner and any other appropriate KRU personnel prior to commencing its activities in order to coordinate interfaces and simultaneous operations with the KRU.

- BRPC coordinates shared water sources used for construction of the ice road and staging pad with CPAI to ensure no over withdrawal occurs. BRPC will provide the KRU North Slope Environmental Coordinator (n1438@conocophillips.com) and HSE Admin Assistant (n1154@conocophillips.com) the specific list of planned water and ice sources and the anticipated volume from each as soon as practicable to facilitate water use coordination.

- BRPC coordinates and agrees to the location of the junction of its ice and gravel roads with the KRU road system with the KRU Sim Ops Planner. BRPC will also coordinate and agree to the location of its ice staging pad with the KRU Sim Ops Planner.

- BRPC shall not conduct any operations on KRU Drill Site 2M.

- BRPC shall not construct its ice staging pad immediately adjacent to any KRU roads. A minimum distance of 50 feet shall be maintained between the edge of the KRU road system and the edge of the staging pad. Designated "driveways" shall be used for ingress and egress to the staging pad from the KRU road system.

- BRPC shall make its ice staging pad large enough to allow for vehicle pull-out and turnaround on its staging pad. BRPC shall not use the KRU road system, and in particular, the access road to Drill Site 2M, to reverse vehicles onto the "driveways" leading to the staging pad.

- BRPC shall prepare and coordinate a traffic management plan with the Kuparuk Sim Ops Planner prior to commencing construction of its ice road and staging pad.

- BRPC's ice and gravel roads shall conform to the plat included in BRPC's October 29, 2012 request letter. Any deviation from this drawing shall be reviewed and approved in advance by the Kuparuk Sim Ops Planner.

- BRPC is solely responsible for maintenance and snow removal for its ice road and staging pad. The snow removal plan must be agreed to by the KRU Sim Ops Planner to avoid interference with KRU operations. This snow removal plan must not allow for snow deposition on KRU pipelines, roads, pads or facilities.

- BRPC is solely responsible for all maintenance, repair, snow plowing and removal of its gravel road. BRPC shall coordinate the placement of signage at the junction of its gravel road and the KRU road system with the KRU Sim Ops Planner to ensure passage of wide loads.

- BRPC shall comply with the Road Use Provisions contained in Attachment 1 to this letter, as well as the specific conditions and rules governing access and travel within the KRU contained in its Ballot 260 Agreement.

- BRPC shall provide on-site contact information, including names, position titles, telephone numbers, emails, and a Single Point of Contact for the activities that are the subject of its October 29, 2012 letter. BRPC shall also provide a detailed map and survey data for its ice road and staging pad that includes pad names, camp names and locations. To facilitate potential emergency response services, this shall be provided to the KRU Emergency Services Chief at e-mail address n1124@conocophillips.com or telephone number 907-659-7494, with a copy to the KRU Sim Ops Planner. CPAI cannot assure that the KRU will have the resources or ability to respond effectively or at all to any requests for emergency response or use of KRU security services.

This conditional non-objection is specific to those activities taking place within the KRU as described in BRPC's October 29, 2012 letter. BRPC's acceptance of these conditions should be indicated by countersigning and returning this letter. At that point, the non-objection of CPAI will become effective. It shall continue in effect until the earlier of: (1) completion of BRPC's activities; (2) August 31, 2013, or (3) termination of this conditional letter of non-objection due to a breach of its conditions by BRPC or its contractors. If you have further questions regarding this issue, contact the Kuparuk Sim Ops Planner at 907-659-7939.

Sincerely,

Bill Arnold

Attachment

Conditions Accepted on behalf of Brooks Range Petroleum Corporation

Signature:

COO

Title:

11/7/12

Date:

ATTACHMENT 1

KRU Road Use Provisions

1. BRPC shall comply with the North Slope Vehicle Policy and the Vehicle Safety requirements specified in the Alaska Safety Handbook.

2. BRPC shall comply with the KRU Foul Weather Policy when traveling across KRU roads. A copy of the Foul Weather Policy may be obtained from the KRU Safety Engineer at e-mail address n1023@conocophillips.com or telephone number 907-659-7220.

3. BRPC shall comply with speed limits while traveling on the KRU road system and obey reduced speed limits for work zones.

4. Use of mobile telephones while driving a vehicle is prohibited at all times.

5. Traffic violations will be reported to BRPC and BRPC shall report actions it is taking to prevent further violations to the satisfaction of the KRU Field Manager.

6. BRPC shall provide at least 48 hours advance notice of any extraordinary road uses, such as rig or camp moves, wide loads, or any other activities that will disrupt normal road traffic to the KRU Sim Ops Planner, with a copy to the KRU Security Captain at email n1019@conocophillips.com or telephone number (907) 659-7213. Requests for permits to move heavy loads across the Kuparuk River Bridge and other bridges throughout the KRU must also be submitted to the KRU Sim Ops Planner at least 48 hours in advance.

7. BRPC shall not stage material or equipment on any KRU drill site or any KRU roads.

8. BRPC shall not park or leave unattended vehicles or equipment on any KRU drill site or any KRU roads.